ABSTRACT OF

Lectures

ON

DISEASES AND INJURIES OF THE EAR.

Delivered in St. George's Hospital,

By W. B. DALBY, F.R.C.S., M.B. Cantab.,

AURAL SURGEON TO ST. GEORGE'S HOSPITAL.

LECTURES I. & II.

In the course of these lectures any remarks upon the anatomy of the ear will be limited to those points which are of practical importance in estimating the changes produced in it by accident or disease, so far as they can be observed by examination both in the living and dead subject, and so far as they interfere with the function of hearing and endanger life.

Affections of the ear naturally divide themselves into those of the external, middle, or internal ear. The external ear, which consists of the auricle and external auditory meatus, is separated from the middle ear by the tympanic membrane. It is sometimes the seat of malformations, as instanced in an imperfectly formed auricle and meatus, the latter being sometimes so small as only to admit of a probe being passed into it, and occasionally being absent altogether. Children have been born with four ears, two on either side; and I once saw an adult, in other respects properly formed, in whom the auricles were so small that they measured barely one inch from the tip of the helix to the extremity of the lobe. Surgical interference in these cases is not often demanded, and where it has been exercised, especially in instances of rudimentary meatus, the results have not been encouraging; this being chiefly due to the fact that where the external division of the ear has been defective, the middle or internal one has been so as well.

The length of the external auditory meatus, although varying in different individuals, is about one inch and a quarter, and the calibre is greater in some than in others. It consists of two parts, the external cartilaginous comprising one-third, and the other two-thirds being an osseous canal in the temporal bone. At the bottom of this canal is the tympanic membrane, forming an angle of 45 deg. or nearly so with the floor. With infants the osseous meatus is not developed, and the membrane is fixed at the outer part of the skull, being thus nearly horizontal in position. At this time of life the portion which eventually becomes bony is membranous, and later in life the freedom of motion which is permitted between the cartilaginous and osseous part of the meatus when the auricle is raised, is due to some slight remains of the membranous part. Great care, then, should be exercised in dealing with the meatus of very young children, especially in the case of a foreign body impacted in this situation. In shape the meatus is somewhat oval, the longitudinal diameter at the external part being the longer, but at the other end the transverse. The whole meatus takes a gentle curve forwards. The upper wall of the osseous portion is nearly horizontal; but, proceeding inwards from the middle, the floor dips downwards, and on this account, and from the angle which the tympanic membrane makes with it, it follows that the floor is longer than the roof. It is partly for this reason, and partly because the calibre is smallest about the middle, that a foreign body which has passed this point is so liable to be pressed onwards in the efforts which are sometimes made to extract it; and, again, it is for this reason that, in using the speculum, it must be tilted a little in order to obtain a complete view of the membrane.

The method of examining the external auditory meatus and the tympanic membrane now almost universally employed in Germany and in this country was originally introduced a few years ago by Dr. von Tröltsch, the Professor of Aural Surgery in Wurtzburg. It seems almost strange that so simple and effective a plan had not been thought of before, in place of the imperfect methods previously in use. It consists in reflecting light from a concave perforated mirror down a funnel-shaped speculum of the kind first known as Gruber's. In consequence of the variety in the size of the meatus, several specula should be at hand (perhaps half a dozen), the straight tubular part being oval in shape. This part of the speculum is generally made too long; it should never measure more than half an inch, and the whole length of the speculum should not exceed an inch and a half. If longer than this, not only has the light to be sent down a greater distance, and therefore the reflector be held farther off, not so good a view being in this way obtained, for the eye is thus placed so much farther from the object, but it is found to be in the way when an instrument is being used, as in removing a polypus. It is unimportant whether the speculum be made of silver or vulcanite: the latter kind, perhaps from the contrast in colour, renders slight changes in this respect on the tympanic membrane more strongly marked. Both kinds remain in the ear without holding. With regard to the specula which are made to dilate with a screw, and the speculum of Kramer which opens out with handles after it has been introduced, it is idle to suppose that the meatus under ordinary circumstances will admit of dilatation, and therefore for general occasions they are useless. There are, however, some cases where Kramer's speculum may be serviceable, and these are those in which the tragus is situated in a more advanced position than natural, and the anterior and posterior boundaries of the cartilaginous part are approximated more than usual, giving rise to a narrowing of this part, so that the orifice is more like a slit than the ordinary shape. These are, however, exceptional instances; and, speaking generally, the object in using a speculum is, not to dilate, but to make a straight tunnel for light down the meatus. In introducing a speculum great gentleness should always be observed, as, even with a healthy meatus, a feeling of faintness will occasionally be induced. Sometimes it will give rise to a fit of coughing, which is stated to depend on reflex action due to irritation of the auricular branch of the pneumogastric nerve. This appears to be the correct explanation of a symptom which has been spoken of as ear-cough, and has been noticed in cases where a foreign body or some other source of irritation has been present in the meatus. In simple examination the reflector is held in the right hand, and when it is desirable for both hands to be free, as in any operative proceeding, it is worn on the forehead and fastened round the head with a band, in the same way as in examining the throat with a laryngoscope. Thus two kinds of reflectors should be at hand. The best light for minute examination of any object is a bright diffused daylight, and this applies as much to the external auditory meatus and tympanic membrane as to any other. The patient should either be seated or stand close up to a window, with the head inclined a little downwards, and the side to be examined turned away from the light, but somewhat sideways. If the day is too dark for a good view, as unfortunately it often is in this country, the light may be reflected from a bull's-eye lamp, lit with gas, fixed to a stand, and arranged that it can be moved up and down so as to be placed on a level with the patient's ear when he or she is seated near. This artificial light is not nearly so good as daylight, as, from the translucency of the membrane, a somewhat yellow tinge is imparted to this structure which is not natural to it. If the patient be in bed, a moderator lamp is a convenient source from which to obtain light. In the absence of this a Miller's lamp may be used.

Foreign bodies in the meatus are generally put there by children at play, and are chiefly stones, beads, peas, and the like. With regard to their removal, two points should be borne in mind. In the first place, that as the meatus is lined by skin continuous with that of the auricle, provided the edges of the object are not sharp, they may remain there for an indefinite period and do no harm. In the second place, that very considerable injury is often done by injudicious efforts which are made to extract them. It is not, however, to be understood from this that no attempts should be made to remove them. But no instruments should be used, excepting when, with the mirror on his forehead, light is reflected down the meatus, and the operator, with both hands free, can see what he is doing. The first thing to be done in any case is to syringe the ear; and in doing this the nozzle of the syringe, which should be fine and

probe-pointed, is to be kept at the upper part of the meatus, so that the returning stream of water may bring it away. This not happening, if it is near the external orifice, or at any rate not more than half way down the meatus, and especially if it be of a soft nature or of an uneven shape, it may often be laid hold of by a pair of ring polypus forceps. A loop of silver wire may sometimes be passed beyond it, and by pulling at this it may be moved outwards; or the noose of a Wilde's snare may be used in the same way, and the body sometimes by this means be secured and extracted. Young children must have chloroform, not because they are being hurt, but because they will not keep quiet; and without this it is impossible to do any good. Adults will sit still in a chair, as they are not put to any pain. If the foreign body cannot be removed in one of these ways, or if it have passed more than half way down, for the reason shown when speaking of the shape of the meatus, any further attempts will assuredly only have the effect of sending it further in, and will frequently result in a rupture of the tympanic membrane. The ear should be occasionally syringed, and the foreign body will gradually approach nearer and nearer the orifice, until it finally drops out. It may be weeks, or even months, before this happens, but, if it be left alone, it will do no harm. If the tympanic membrane be unfortunately ruptured, this is generally followed by suppuration in the cavity of the tympanum, a discharge from the ear lasting a long time, and more or less permanent deafness. After such an accident, if there be much swelling of the meatus and pain, a few leeches in front of the tragus, followed by fomentations, will be advisable. Anything more energetic than the treatment suggested in the case of foreign bodies in the meatus is thought more likely to prove harmful than beneficial, notwithstanding the numerous instruments that have been brought forward, it is said with the object of getting behind the body and removing it.

In addition to the deafness induced by cerumen when it blocks up the meatus, there is frequently tinnitus, and sometimes of the most distressing character. Anything which causes undue pressure of the stapes on the fenestra ovalis will produce it, and in this case it is brought about by a plug of wax directly in apposition with the tympanic membrane, thus transmitting pressure through the malleus and incus on to the stapes. The same exciting cause will often induce attacks of giddiness, and this symptom has occasionally existed for years without eliciting a suspicion of its cause, the patient in the mean time having been submitted to all sorts of treatment, without, of course, receiving any benefit. This arose from the fact that there was no accompanying deafness to point to a cause, for in these cases the plug of cerumen does not entirely cover the membrane, and so there is ample room for vibrations of sound to fall upon it and be transmitted as before. As a rule, however, there is deafness as well. Accumulations of hardened cerumen, from continued pressure on the membrane, will occasionally produce ulceration of this structure, thus becoming the direct cause of perforation; and in the same way they have occasionally induced partial absorption of the walls of the bony meatus. There are some preparations showing this in the museum of the College of Surgeons. The only legitimate way of removing cerumen is by the use of the syringe, and the best form is one where the nozzle is very small and can be removed from the other part by bayonet action. This form of syringe is quickly filled, and so time is saved; and from the small size of the nozzle the meatus is not blocked up by it. In so simple an operation as syringing the ears there is a skilful and an unskilful method of doing it. The auricle should be drawn upwards between two fingers of the left hand, so as to put the whole meatus as far as possible in a straight line, and the nozzle of the syringe should be kept in close contact with the roof of the meatus. If the secretion is very much hardened, it is well it should be softened by a little warm water poured into the ears for a few nights successively. At intervals during the syringing the ear should be examined with the speculum to see if the canal is clear; for if it is so, considerable irritation may be set up by the stream of water falling with force upon the membrane. It is not very rare to meet with patients who, having had their ears syringed vigorously when there was nothing to bring away, have had inflammation of the membrane set up, which has ended in a perforation. The wholesale way, therefore, in which people get their ears syringed as soon as they feel deaf is to be deprecated.

One of the most troublesome affections of the external auditory meatus is the formation of small abscesses, which may occur at any situation in this canal. They do not seem to be confined to persons of any particular age or constitution. The first symptom is pain in the ear, which in a few hours becomes so acute as to put sleep out of the question. After twenty-four hours or so the meatus in its entire extent will be swollen; sometimes the whole external ear will be enlarged, red, and tender to the touch. The movements of the jaw occasion great pain. There is more or less deafness, in proportion to swelling. If the patient be seen within a day or two of the commencement of the attack, the greatest benefit may be afforded by two or three leeches placed in front of the tragus, just over the articulation of the lower jaw, and followed by fomentations: in this way the affection may be cut short occasionally. When the leeches are applied, the meatus should be filled with cotton wool, to prevent the blood getting in. If not checked in the early stage, the state of things described will increase in severity for several days, and, on examining with a probe, one point will be felt to be far more acutely tender than any other part of the meatus. The whole meatus is so swollen that it is not possible to see the position of the abscess with a speculum. This point having been distinctly localised, the sooner an incision is made into it the better, as by this the tension of the parts, to which the agonising pain is due, is relieved. The best knife to use is a curved sharp-pointed bistoury, and a free incision should be made as it is withdrawn. After this the patient gets well in a few days. Very frequently, however, he is no sooner well of one abscess than another commences to form, and all the suffering has to be endured again. It is this recurrence that makes the affection such a troublesome one. Sometimes six or seven abscesses will occur successively in the same patient, obliging him to remain in the house for as many weeks, and causing an amount of suffering altogether disproportionate to the gravity of the illness. In recognising this occasional peculiarity in these cases, caution will be observed in promising a patient that he or she will be well within a certain time.

The diffused form of inflammation of the external auditory meatus differs from the circumscribed, inasmuch as it does not terminate in abscess, and, as its name implies, in being diffused throughout the integument of the canal. Since the outer cuticular layer of the tympanic membrane is continuous with that lining the meatus, there is always a certain amount of risk lest this membrane become implicated, and for this reason this affection is more serious than the one just considered. It is not strictly correct to describe it as being of two kinds—viz., acute and chronic,—because, although the attacks are acute at one time and chronic at another, their gradations so insensibly pass into one another that an artificial division is practically useless. Children are especially liable to it; and as it is generally neglected among the poorer classes, with them it is not unfrequently the origin of a perforation of the tympanitic membrane. It often succeeds the exanthemata, although not nearly so commonly as purulent catarrh of the middle ear spreading along the mucous membrane from the throat. The diffused form of inflammation of the external meatus commences with a feeling of uneasiness and itching just within the orifice, which very soon becomes red, tender, and swollen; and there is pain during mastication. These symptoms increase in severity, until, with the appearance of a discharge, the pain ceases, and the swelling gradually subsides.

Such is briefly an account of its acute stage, which usually occupies a week or ten days. The treatment is palliative—viz., leeches and fomentations; but as this affection does not occur to persons in a good state of health, the diet should be attended to, and a change of air, if possible, be resorted to, for it is most desirable not to let this condition become a chronic one, as it is most apt to do.

Eczema is a common affection of the outer ear, and may be acute or chronic. After repeated attacks (for a patient who has once suffered from it will be very liable to it again) the auricle becomes very much thickened, and the entire meatus shares in the same condition. If there is any deafness, it is only so far as may be accounted for by the narrowing of the canal, which takes place when the disease has lasted for a long time. Like eczema in any other part, it is

very obstinate; but if the patients will consent to keep to rules of diet, including an absence of stimulants, they will get well. This is more important than any external applications. Of these, very mild mercurial ointments are, perhaps, the most useful; and before they are applied the parts must be carefully dried.

Exostoses are not unfrequently met with in the external auditory meatus, and are not confined to any situation in its course. They are solid bony growths, covered with periosteum. Sometimes there are two or three at one time, and they scarcely ever have a pedicle. On this account, and from their position, they are not easily removed by an operation. Fortunately, this is not often necessary, as they seldom entirely close the meatus, and so do not interfere very materially by their presence with the hearing, but do so indirectly by secretion of cerumen and epidermis collecting behind them; and in this way may be very troublesome. They have been considered to be the result of a gouty diathesis; and the long-continued use of iodine applied locally has been said to induce a diminution of their size. No evidence of either of these propositions can be found. These osseous tumours, or enlargements of the bony meatus, as the case may be, are of very slow growth, and acquire a considerable size without the patient discovering them.

ON THE NATURE OF THE CONDITION CALLED EPILEPSY.

BY J. THOMPSON DICKSON, M.A., M.B. CANTAB.,

LECTURER ON MENTAL DISEASES AT GUY'S HOSPITAL, AND PHYSICIAN TO THE INFIRMARY FOR EPILEPSY AND PARALYSIS.

IN June, 1870, I published a *résumé* of the results of a series of experiments I undertook some time previously, inquiring into the "Nature of the Condition called Epilepsy," and I am indebted to numerous friends for kind expressions of approval of the views I there set forth. Some of the letters I received on the subject confirmed many points I sought to establish in that paper. Other correspondents catechised me, and discussed the details of my facts. The most, however, put to me the practical question, "How do you treat epilepsy?" My original intention was to complete a second series of experiments, and publish the conclusions I might draw from them before proceeding to the record of my results of treatment; but in order that I may fairly and sufficiently reply to all who have done me the honour to address me on the subject, I have determined upon publishing my views and experiences at once, and I propose at the same time offering a few remarks in answer to those correspondents whose letters require special notice.

In premising, I must again set forth clearly and distinctly the fact that convulsion is no essential part of epilepsy, and that the idea of the former must be dissociated from the idea of the latter before the condition we call epilepsy can be clearly understood. In my paper I demonstrated that the manifestation of epilepsy was a concatenation of phenomena dependent upon various abnormal states of the surface grey matter of the cerebral lobes, and that the only constant among the phenomena was loss of consciousness resulting from the proximate cause of the attack—viz., cerebral anæmia produced by contraction of the small arterial vessels and capillaries—the first effect of any irritation of the brain's surface. It will not therefore be difficult to grasp the fact, that if the spot on the surface which becomes the seat of the affection should be a centre presiding over a ganglion controlling muscular movements, convulsions or movements in the muscles so deprived of control will occur; but if, on the other hand, the spot on the surface should not be associated with ganglia controlling muscles, muscular manifestations cannot occur. And what is true of the muscular manifestations is true of all the other manifestations in epilepsy, and so definite and perfect are the relations of control to action that they can be brought into algebraical formulæ.*

* These formulæ were exhibited and explained to the members of the Hunterian Society, before whom the paper was read, but they are rather too long for publication here.

Almost immediately after the publication of my paper in June, 1870, Dr. B. W. Richardson wrote to me, stating that, in an independent inquiry, he found that in cases of death by chloroform the stage of chloroform narcotism presented conditions similar to those I had described; my propositions as enunciated being—

1. Epilepsy is a contraction of the cerebral capillaries and small arterial vessels; the order of the stages in an epileptic attack being—1st, irritation of brain, either direct or secondary to exhaustion; 2nd, contraction of cerebral capillaries and small arterial vessels; 3rd, cerebral anæmia and consequent loss of consciousness.

2. The muscular contraction and spasm, together with all the varying phenomena associated with epilepsy, are altogether secondary, and not at all essential or constant, but they are all manifestations of imperfect nervous (cerebral) control, or a loss of balance between the nervous and other systems.

3. The constant and therefore the pathognomonic sign of epilepsy is loss of consciousness; it is the first subjective phenomenon, and it resulted in Dr. Richardson's experiments, the details of which were published in July, 1870.

Dr. Moxon, with whom I have frequently discussed the subject, wrote me as follows:—"All your facts show is, that there is arterial anæmia as the result of the cause of epilepsy; while many facts go to show that mere anæmia cannot cause a fit. Is it, then, that there must be a sudden anæmia produced in a brain nourished by adequate supplies in ordinary times?" In answer to this question, a reference to the paper will prove that I nowhere asserted that mere anæmia was the cause of the fit. My point was, epilepsy is a contraction of the cerebral capillaries and small arteries. Cerebral anæmia is the third phenomenon of the stages of attack, and therefore is not the cause of the fit. I stated that an animal bled to death will always have a convulsion before it dies. This is true, and the convulsion is epileptic; and it seems to disprove Dr. Moxon's assertion that mere anæmia cannot cause the fit; and it would appear to re-attack my own position of the defensive. The truth of this, however, is, that there is a specious ambiguity in the term anæmia, as used by Dr. Moxon; and it is an expression unequal in its force to that of "cerebral anæmia," which I have employed. When an animal is bled to death Dr. Moxon's mere anæmia occurs; but it is a very imperfect state of anæmia, and by no means corresponds with that blanched bloodlessness which is the condition of the brain when it is anæmic as a result of epilepsy. Dr. Moxon's mere anæmia does not produce a fit, but it may irritate the cerebral vessels, and if it does we shall have all the phenomena of epilepsy, and among them, in its proper place, that perfect cerebral anæmia which is one of the results of epilepsy, and the objective to which the subjective phenomenon of loss of consciousness is due. Dr. Moxon has, however, in part apprehended my meaning in his question of suddenness. The cerebral anæmia of epilepsy is sudden; it is the effect, not the cause, of the epilepsy, though it is the cause of the suspension of consciousness. The brain in which it occurs may be or may not be nourished by adequate supplies at ordinary times, but there is no living human brain, I believe, in which epilepsy may not be produced. In support of this view I will merely mention the numerous recorded cases of epilepsy which have resulted from fracture of the skull with depression.

Dr. Moxon again asks: If mere anæmia were the cause of epilepsy, it would be common in chlorosis; and why in common fainting does not a fit come on? The first of these queries is replied to in the answer I have already given to the question of mere anæmia. In precise terms, however, unless the mere anæmia of chlorosis produces irritation of the brain, there will be no contraction of the cerebral capillaries and small arterial vessels, and therefore no epilepsy. With regard to common fainting, I think most observers, and I am sure Dr. Moxon, will agree with me that it is impossible to draw a line between it and epilepsy. So perfectly does epilepsy run into syncope, and so frequently is that which is called a common faint *le petit mal*, that there is no demonstrable line of demarcation between the two; in fact, I am strongly inclined to believe that the phenomenon of fainting is more often the manifestation of epilepsy than is generally supposed.

Dr. Moxon again says:—"It seems to me that exaggerated irritability of the direct centres of epilepsy is a simpler

idea, though not so mechanically graspable. You have, however, only transferred the same exaggerated sensibility to the vascular nerves, and not explained its origin. Why is it easier to think of excitants of the vessel-nerves to spasm than excitants of the motor centres to the same?" A glance at my paper, however, must answer this, for I never spoke of exaggerated sensibility of vessel-nerves; I do not credit these nerves with more than ordinary sensibility; neither is the contraction of the vessels primary, but secondary to irritation. It also seems that, in the first place, Dr. Moxon has passed by one point that I was at some pains to show—namely, that nerve currents only pass in one direction—i.e., in the direction towards the surface of the brain, a fact established by Galvani and confirmed by Niobe; otherwise he could hardly have spoken of exaggerated irritability of the direct centres of epilepsy. He has not, however, defined what the direct centres of epilepsy are, while the idea of exaggerated irritability seems to be wrapped up in the mystifying complications of convulsion and muscular spasm. I may here, for the sake of clearness, illustrate the simple idea of epilepsy by the detail of an experiment. A rabbit was trephined, the dura mater was divided, and the brain, covered with pia mater and arachnoid, was exposed; a knife was then inserted into the brain, which instantly became blanched and bloodless, and the animal at the same moment became insensible. The knife here represents the irritator, and was the cause; the vessels contracted in obedience to their natural and ordinary sensibility, and these circumstances, together with the subjective phenomenon of unconsciousness which resulted, was the whole of the epilepsy. Neither is any epilepsy more under any circumstances, whatever be the cause of the irritation; but according to the character and the seat of the cause, secondary phenomena will be produced, which often complicate and so distort with hideous contortions the simple idea illustrated, that it has been lost to observation, whilst the violent manifestations have attracted and absorbed all attention.

A reference once more to my paper will show that, though I implied that vessels might be channels of irritation, I spoke of the vessels as one only of many sets of channels through which the brain's surface might become irritated, and I mentioned many other sources, such as direct irritation of the surface of the cerebrum, and irritation of the peripheral extremity of nerves; secondly, I must again insist that irritability of the vessel-nerves, when it exists, is secondary to, and the consequence of, irritability of the brain's surface; and thirdly, I think I clearly explained in my paper that the causes of surface irritation might be classed under two heads—the one "direct," the other "secondary to exhaustion." Whilst I stated, both at the commencement and the conclusion, that surface irritation was the cause of the contraction of the cerebral small vessels and capillaries, nowhere did I assert the converse, which would be reasoning by a sort of back logic. A crow is a black bird, but a black bird is not a crow. Irritation of the surface of the brain will cause contraction of the cerebral vessels, and consequently cerebral anæmia; but mere anæmia will not by any means conversely produce contraction of the vessels, and only under some circumstances will it produce irritation of the surface of the brain.

However reluctant we may be to admit the fact, we cannot deny to ourselves the truth that cerebral phenomena are mechanical, and manifestations of motion; and that in epilepsy, as in all diseases of the nervous system, we must look for material causes, and when we do so we shall probably find our object untrammeled and unfettered by the obscurity which hitherto has surrounded it.

Some of the same questions as Dr. Moxon put to me were written at the foot of a copy of my paper by my friend Dr. Elphinstone, so that to this gentleman I make the same reply as I have done to Dr. Moxon. Dr. Elphinstone, however, asks the additional question—how hereditary epilepsy is to be accounted for if my position is to be maintained? The answer to this is not wanting, and goes to make another link in the chain of the evidence upon which my argument is based. There is as much a material cause for transmitted epilepsy as for the manifestation that can be developed in a guinea-pig by section of its spinal cord. The son is not so unlike the father or so different in his nature as he appears or may seem; there is a variation in their education which produces variation in their mental and general development; but still, speaking in general terms, the son bears the nature of his father as the twig does the stock tree. However inexplicable, the inexorable logic of fact shows that impressions of many and various kinds are transmitted, and not the least important of these are the transmitted impressions of the nervous system. Some authors have gone so far as to assert that memories are transmitted, but the evidence of this is imperfect; the impressions of habit, however, cannot be doubted. Father and son will pursue the same idea of life, though they may never have seen one another. Many cases are on record, but I have one within my own observation. Father and son have never seen one another since the son's infancy. The son is now abroad, the father in England; but so alike are these two individuals that there cannot be a mistake as to their having been struck, as it were, in the same die. The peculiarities of the one are the counterpart of the peculiarities of the other: they both walk oddly; they are both excellent shots, but they both raise the gun to the shoulder with an eccentric motion; their habits of life correspond; in personal appearance, the only difference that is perceptible in them is age—a difference of about thirty years; and not the least marked agreement is that of handwriting—so much do the letters of the son resemble those of the father that it is hardly possible to distinguish them; whilst the temperament and temper of the father are reproduced in the son as perfectly as the seed-corn is reproduced in our harvest-fields.

Dr. Elphinstone, and Dr. Moxon too, will probably answer that in this my case is against myself—that I have only shown in regard to a healthy condition what is undisputed, but that I have proved nothing in respect to the unhealthy condition. I think, however, I may at least claim for all the organs of the body, whether healthy or otherwise, the principle of reproduction in the next generation, and the perfection or imperfection of the reproduction will vary with the healthiness or unhealthiness of the organ as possessed by one or both parents, so that a father or a mother with an unhealthy brain will progenerate a son or a daughter whose brain will also be unhealthy. This is abundantly proved by very demonstrable facts. Again, there are instances on record in which whole families have been born with a nævus on the face, and in a corresponding position in each individual. And generally in the skin it is by no means uncommon to see vagaries reproduced in the second generation. If I mention phthisis I may be met with the objection that I am speaking of a constitutional disorder, and am therefore beside my point. But I think no one will doubt the fact of the inherited delicacy of the lungs and the susceptibility of these organs to slight influences observable in the children of phthisics. I think also that no one will question the fact of transmitted susceptibility to disease in the case of the heart. Surely, then, I am not asking for more in the case of the brain; I am only pleading that the same potentiality may be allowed to be possible in the brain as we accord with much less evidence in the cases of other organs; and, once grant that the brain, or any part of it, is in any way imperfect, should the imperfection only be *atony*, as the inherited impression, we have all that is necessary for the production of the whole train of the phenomena of epilepsy. I incline, however, to the opinion that more perfect impressions still are transmitted, and that the impression of the habit of the patient may be reproduced in the child. I know that some of my friends will argue that my own experiments directly disprove this hypothesis since I have not succeeded in breeding epileptic animals from parents in which I have induced epilepsy. But although I have not obtained such results, I accept those of Dr. Brown-Séquard as conclusive on the point it has been done, and I anticipate success in my future experiments; in fact, I anticipate the same result in the course of two generations of epileptic guinea-pigs as we observe among human races and families who are the subjects of brain disease—viz., sterility and eventual dying-out of the family. This, however, is a subject I must not enter upon here.

(To be concluded.)

IT is said that dengue fever is now extending itself to the brute creation, and that monkeys and cats are severely suffering from the disease in some parts of Bombay.

THE RELATIVE FREQUENCY OF DISEASE BETWEEN THE RIGHT AND LEFT SIDES OF THE HEART;

DEGENERATION OF THE HEART, ITS CAUSES AND MEANS OF AVOIDANCE.

BY CORNELIUS BLACK, M.D. LOND., M.R.C.P.,

CORRESPONDING FELLOW OF THE IMPERIAL SOCIETY OF PHYSICIANS OF VIENNA, CORRESPONDING MEMBER OF THE IMPERIAL SOCIATY OF MEDICINE OF LYONS, ETC.

IF the question were asked, "Which side of the heart is the more frequently affected by disease?" the answer in perhaps nine cases out of ten would be that the left side of the heart is the one which more frequently suffers. This answer would not, however, embrace the whole truth. It would be true of the aggregate of cases of cardiac disease without reference to age; but it would be untrue if the occurrence of cardiac disease were referred to the later periods of life. If a man lives to the age of forty years without having suffered from cardiac disease, and if after that period the heart becomes affected, the mischief will, as a rule, be found to exist on the *right* side. If, on the contrary, cardiac disease should occur before that age, the disease will almost invariably be found to exist on the *left* side. Hence it follows that the right side of the heart is the seat of cardiac disease occurring after middle age—the left side of the heart the seat of cardiac disease occurring before middle age.

As in time, so it is with respect to the nature of the diseases which affect the right and left sides of the heart respectively. Those of the right side are the result of tissue-degeneration, or of mere mechanical influences; those of the left side are almost invariably the product of inflammation. The former are diseases which tend to widen the valvular apertures and to dilate the right side of the heart; the latter are diseases which tend to contract the valvular apertures and to increase the size and bulk of the left side of the heart.

Disease of the right side of the heart is essentially passive and secondary in its character; disease of the left side of the heart is essentially active and primary in its character. I speak now of disease when it occurs, not when it has existed for some time. Active inflammation of the left chambers of the heart arises; it progresses to a certain extent; treatment subdues it; the patient recovers; but a certain amount of damage is left behind. Years pass on; the patient during this time appears none the worse for his previous illness; but at length pulmonary symptoms suddenly manifest themselves, and then it is that the physician discovers that the left side of the heart is permanently damaged, and that the present condition of the lungs is traceable to this cause.

In this instance the mischief in the heart inducing this condition of the lungs is not, strictly speaking, active. The first step of the cardiac disease was active; but the second step was chronic. Bit by bit—increment by increment,—after the patient's apparent recovery from the primary attack, is the valvular lesion left by such attack added to, not perhaps constantly, but intermittingly, until at length the aggregate increments of addition so hamper, oppress, obstruct, and distort the mitral, or the mitral and aortic valves, that secondary consequences begin to follow.

In such a case the cardiac disease producing the first degree of valvular lesion was *active*, or *acute*; whilst that which really induced the secondary consequences—congestion of the lungs, hæmoptysis, hypertrophy of the lower lobes, or hypertrophy of the left ventricle—was essentially chronic.

Why are the affections of the two sides of the heart essentially different in their nature? Why do those of the left side of the heart point to an inflammatory origin; those of the right side of the heart, with but few exceptions, to a non-inflammatory origin? There must be some cause for this difference. What is it? The reason is found in the difference which exists between the constitution of the blood which reaches the left side of the heart from the lungs and that which reaches the right side of the heart from the general system. The blood reaching the left side of the heart from the lungs has been replenished with all the elements necessary for the growth of the tissues; it has been purified, renovated, and vivified by its oxygenation in the lungs, and it is thus rendered in the highest degree stimulating to the left heart. The blood reaching the right side of the heart from the general system has been deprived, by the requirements of growth, of the chief portion of its nutrient materials; it has been fouled by the débris of tissue-waste; it has been further poisoned by its impregnation with carbonic-acid gas: it is therefore a depressant, rather than a healthy excitant, to the right heart. True, it brings with it to the chambers of the right heart the products of the digestion of food; but what are they, either as nutrients or excitants, when they reach that point? They are no more than inert, unusable, passive elements. Not until they have passed to the lungs, and have there received the vivifying influence of oxygen, can they enter into the real composition of the blood, and thus become active, exciting, disposable constituents of it.

"Like begets like" in very many instances. This axiom is true in relation to diseases of the heart. The rich, stimulating blood of the left ventricle urges, feeds, and actively supports any disease which may arise at that point; whilst the poor, impoverished, fouled, tainted, and attenuated blood which flows through the cavities of the right heart favours disease of a correspondingly low and degenerate character.

So long as the body is rapidly built up and as rapidly pulled down, disease of the left heart maintains an active character; but when the balance between nutrition and waste is destroyed—when nutrition becomes less active, whilst waste remains the same, or is more active than before,—disease of the left heart loses more and more of its active character, and approximates more and more in its nature to disease of the right heart. In many this change begins at the age of forty; in others, not until five or ten years after that period. Thenceforward the tendency to inflammatory disease of the left heart declines—the tendency to degeneration increases. With the gradual declination of the one tendency and the gradual increase of the other, a period is at length reached when active inflammatory disease ceases, as a rule, to affect the left heart. At this juncture the left and right sides of the heart, hitherto dissimilar in their tendencies, are in this respect almost as one. The active tendency of early life has given place to the passive tendency of advancing years—inflammation to degeneration.

Acute rheumatism—a fruitful cause of cardiac disease in the earlier periods of life—is seldom seen beyond the age of fifty. I have, however, attended a case of acute articular rheumatism at the age of seventy-five; but such an instance was an exception to the rule. After fifty, acute rheumatism gives place to a form of rheumatism which slowly produces rigidity of the coats of the bloodvessels, hardens and contracts the tendons, thickens and renders stiff and rigid the ligaments of the joints, hardens and lessens the articular cartilages.

Thus, then, according to a law of nature, the *ultima linea* of life ends in—degeneration.

Apart from the influence of this law, can any accidental, casual, or avoidable circumstance favour this immutable tendency to degeneration, speaking more particularly in reference to the heart? Yes; many circumstances are daily, hourly, momentarily doing this. Thousands annually perish from heart disease, whose lives might and would have been prolonged had but proper attention been given to the simple laws of nature. These laws demand attention to the three great vital functions—the action of the brain and nervous system, respiration, and circulation.

None of these functions must be overworked, as none of them must fall short of their proper duty. Healthy, regular, daily action is their law of life. If the brain and nervous system are overworked, vitality is lowered, the resisting power of the body is diminished, disease is easily produced. If the brain and nervous system are underworked, the generation of nervous power is low and deficient, the vitality of the tissues becomes low in proportion, and disease is easily excited. Overwork exhausts, ruins, kills the body, just as the continued generation of the galvanic current exhausts the acid and wears out the zinc plate. The

weakest point of the body has to bear the result of this violation of nature's laws. If the heart is that point, disease falls upon it, and death before the legitimate term of man's existence is the consequence.

To keep the body in perfect health it must be duly oxygenated. There must be free and ample interchange between the blood in the lungs and the air entering the pulmonary cells. The life-stream must be purified by its elimination of carbonic acid; it must be vivified by the absorption of oxygen. The fulfilment of these conditions demands a full, free, and constant admission of pure air into the lungs. This full, free, and constant admission of pure air cannot be obtained in badly-ventilated houses, crowded buildings, schools as at present constructed, theatres, manufactories, pits, underground railways, and the like.

When the body has reached that age at which natural decay or degeneration has begun, the absence of pure air hastens and increases the degenerative tendency. Where the heart is more prone than other organs to disease, the want of pure air falls with powerful effect upon the tissues of the right heart. Their nutrition is defective by reason of the impurity of the blood with which they are fed, their vital force is lowered, their muscular fibre loses its tonicity, degeneration and debility take the place of active nutrition and power. If in this condition any stress is thrown upon the heart by hurried walking, by lifting, climbing, violent declamation, passional expression, singing, laughing, or by any unusual exercise of the voice, the tricuspid valve gives way, it henceforth fails to close its aperture, and the results of a back-flooding of blood upon the venous system of the body begin to follow. If none of these exciting causes occur, the continued breathing of impure air is followed by constantly progressing degeneration of the tissues of the valves and muscular structure of the right heart; they become soft and feeble, their atoms shrink; the segments of the tricuspid are at length unable to meet in their attempt to close their aperture; a small chink or slit is left between them; through this the blood finds its way into the auricle above at every contraction of the heart; and soon regurgitation is followed by the secondary consequences produced in the general system—congestion of the liver, stomach, spleen, kidneys, bowels—by hæmorrhoids, general dropsy, and occasionally by cerebral mischief.

I hold that the breathing of impure air is a fruitful source of disease of the right heart occurring after middle age. How many people ignorantly favour its occurrence by confining themselves to closely-shut, non-ventilated, hot, stifling rooms, in which the carbonic acid has accumulated to 2 or 3 per cent. of the air they respire! How many are thus destroyed by being compelled, through the exigencies of life, to pass the greater part of their time in pits and manufactories where ventilation is defective, or in which the air respired is poisoned by noxious fumes and offensive emanations from the materials undergoing the process of manufacture! How many are falling victims to the poisonous influence upon the heart of the atmosphere of an underground railway! What do these facts suggest? How are these evil results to be prevented? The simple answer is—Let the rooms in which you live be effectually ventilated by an incoming current of air filtered from all adventitious impurities, and so divided that no draught shall be felt; and by an outgoing current which shall remove from the apartments the carbonic acid, carbonic oxide, sulphurous-acid gas, sulphuretted hydrogen, and other noxious compounds, as rapidly as they are generated. Apply the same principle to public buildings, theatres, schools, manufactories, pits, and to all places in which people are accustomed to congregate.

As to underground railways, the best plan is to avoid them. True, the time passed in their polluted atmosphere is usually very short; but it is, nevertheless, sufficiently long to paralyse occasionally the heart's action, and always, by its pollution of the blood and by its direct effect upon the nervous system, to favour degeneration of the structures of the heart.

It often occurs to a medical man to visit a patient for the first time, and to find him suffering from a dilated right heart, tricuspid incompetency, some degree of hepatic enlargement, and œdema of the lower extremities. There is no asthma, no emphysema of the lungs, no affection whatever of those organs to impede the onward flow of blood from the right ventricle, no history of cardiac affection in earlier life. The patient may for some short time have been sensible of a change in his breathing on walking rather quickly, or in mounting the stairs, or he may never have felt, or at least recognised, any such sensations. His attention was first arrested by observing that his feet and ankles were swollen, especially at night on going to bed. This sign it is which gives him the first alarm, and which causes him to seek the aid of his physician. An examination of his case detects a dilated right heart, with incompetency of the tricuspid valve. How has this condition of the heart been brought about? There is no history of previous cardiac disease; there has been no illness ushering in the present condition of things; there has never been, nor is there now, any affection of the lungs, and yet the right heart has suffered a lesion fatal to life! The answer is, that every such case has passed the age of forty, that the tissues of the right heart have entered upon the period of degeneration, and that this degeneration has, with very few exceptions, been hastened by the breathing of an impure air, either during the pursuit of the ordinary occupations of life, or in the patient's own dwelling.

When the degeneration of the right heart has progressed to a certain extent, incompetency of the tricuspid valve follows either with or without the aid of an exciting cause. Hence it is easy to understand why dilatation of the right heart and tricuspid incompetency are often found to exist apart from any previous history of cardiac disease.

The third great vital function which influences the degenerative tendency of the heart is that of the circulation of the blood. To preserve the health of the tissues, the blood must not only be pure and rich in the materials of growth, but it must flow with a certain speed through all the bloodvessels. If the speed with which the blood moves is on the side of either *plus* or *minus* of the standard of health, disease will shortly arise. If it is on the side of *plus*, active disease of the heart, where that organ is the one to suffer, will follow. If on the side of *minus*, tissue degeneration will ensue. Active disease will be the consequence before middle age; degeneration after that period.

These facts teach that all violent and long-continued efforts of the body should be avoided. They hurry the heart's action to an inordinate degree, they cause it to throw the blood with great force into the extreme vessels, and, as there is almost always one organ of the body weaker than the others, the vessels of this organ become distended, and remaining distended, the organ itself becomes diseased. Running, rowing, lifting, jumping, wrestling, severe horse-exercise, cricket, football, are fruitful causes of heart disease. Those which require the breath to be suspended during their accomplishment are more fruitful causes in this respect than those which require no such suspension of the breathing. Rowing, lifting heavy weights, wrestling, and jumping do this; and of these, rowing is the most powerful for evil. At every effort made with the hands and feet, the muscles are strained to their utmost; the chest is violently fixed; no air is admitted into the lungs; blood is thrown by the goaded heart with great force into the pulmonary vessels; they become distended; they at length cannot find space for more blood; the onward current is now driven back upon the right heart; its cavities and the bloodvessels of its walls become in like manner distended; the foundation of disease is laid. Hypertrophy, hæmoptysis, inflammatory affections of the heart and lungs, are the consequences in the young; valvular incompetency, rupture of the valves or of the muscular fibres of the heart, pulmonary apoplexy, and cerebral hæmorrhage, are too frequently the immediate consequences in those of more mature years.

If the flow of blood is *minus* the standard of health, the heart's walls are imperfectly nourished by reason of a deficient supply of food within a given time; the blood itself, receiving less aëration, is in consequence more impure; degeneration of the heart's walls is thus induced, if it does not already exist—hastened, if it is present.

(To be continued.)

FOOT-AND-MOUTH DISEASE is raging very extensively in Dorsetshire. Thirteen thousand animals are reported to be suffering from the malady, which assumes a particularly virulent form in sheep.

DESCRIPTION
OF SOME
SURGICAL INSTRUMENTS NOT COMMONLY KNOWN IN ENGLAND.

BY W. F. TEEVAN, B.A., F.R.C.S.,
SURGEON TO THE WEST LONDON AND ST. PETER'S HOSPITALS, ETC.

WITHOUT some of the instruments I am about to describe no surgeon can diagnose and successfully treat many of the affections of the genito-urinary organs. Two of the instruments depicted have within the past few years found their way into English practice, and I have no doubt the others will before long become as familiar. I would premise my observations by saying that, except in certain particular cases, the employment of metal instruments is to be deprecated as causing more annoyance to the patient and far greater local irritation than soft ones. The saying of M. Mercier ought always to be remembered, "La sonde rigide ne cede pas; c'est l'obstacle qui cede devant elle." The use of a stiff, unyielding instrument in a passage often tortuous and rugged can only be accounted for by an ignorance of those pathological alterations which take place in stricture of the urethra. It is hardly fair to a patient for a surgeon to commence the practice of catheterism in the most sensitive tract in the body without previously ascertaining by a trial on his own person the comparative merits of soft and metal instruments, and I hope that before long the latter will be rarely seen. There are, however, some surgeons who will not be baffled in the passage of an instrument, and hence these gentlemen will always remain the staunch advocates of an order of things which, happily for humanity, is passing away. Armed with a pointed silver catheter no surgeon need be foiled in attempting to get into the bladder; it is merely a question of force, more or less—no flesh can withstand its bloody onslaught. In one of the museums of London there is a very painful reminiscence of a celebrated surgeon, in the shape of a preparation exhibiting a metal instrument *in situ*, which he had managed to pass into the bladder *without traversing the prostatic urethra*. But I have heard it stated that some patients actually prefer metal instruments. Unfortunately, however, such a statement only shows that in a particular case the surgeon had, through an imperfect diagnosis, used an inappropriate instrument; for if a patient with enlarged prostate and stricture—a common complication—be treated for the latter complaint with an olivary soft bougie he will certainly be subjected to considerable annoyance, for the end of the instrument will impinge against the enlarged lobe of the prostate, and can only be carried over the obstacle by sheer force, whereas a curved metallic bougie will only cause such inconvenience as is inseparable from the material of its construction. The progress of soft French instruments in England has been much retarded by the inferiority of those made here, for most of the catheters soon crack across the eye, and as a rule the olive is much too large, and the neck not being proportionately thick, the bougie gets bent at right angles at its neck, much to the patient's annoyance and the surgeon's fear, for I find there is a wholesome dread of the separation of the olive from its shaft. However with the Parisian instruments such an accident is impossible, and not only are they cheaper, but they are infinitely more durable. I consider a French bougie lives ten times longer than its English representative, which generally ends its short career by breaking its neck. For the introduction of elastic instruments into surgical practice we are indebted to a French goldsmith, named Bernard, who brought them before the French Academy in 1779.

With the exception of Nos. 10 and 12 all the instruments I am about to describe are elastic.

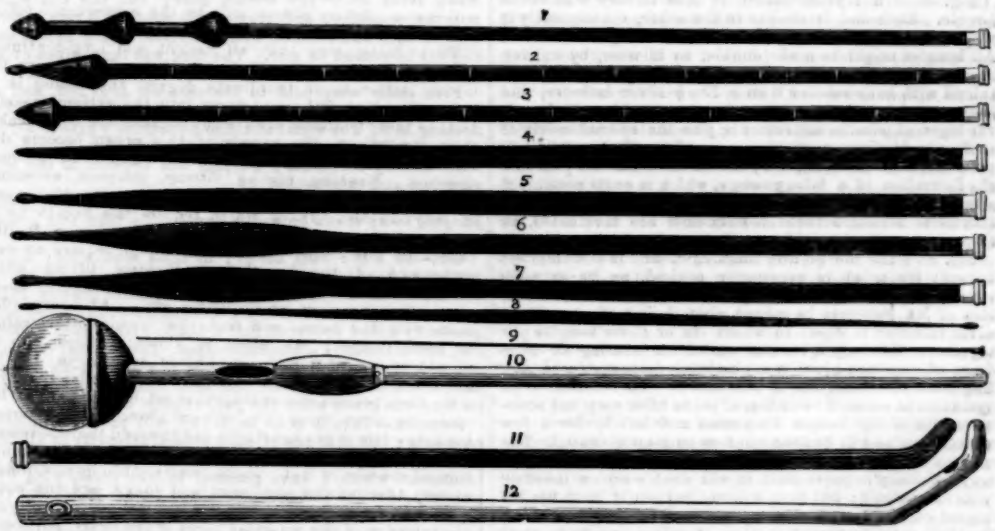

Fig. 1 illustrates the "bougie à trois nœuds." The cone at the end is succeeded by others, each larger than its predecessor. The bougie may be used for dilating strictures or applying ointment to any part of the urethra. It is well known to those who use the bougie à boule that although at first the cone may only be able to get through a stricture, yet, if the instrument be moved to and fro a few times, the obstruction will no longer be felt, owing to the dilatation exercised; and it is the knowledge of this fact which enables us to dilate a stricture considerably at one sitting, if it be thought desirable, by the use of the "bougie à trois nœuds," for each cone, being larger than its predecessor, more and more dilates the contracted part. The instrument is peculiarly adapted to ring strictures, and I would say to them only.

Fig. 2 is the "bougie à boule" as altered by Dr. Mallez; and Fig. 3 is Dr. Henry Dick's modified "bougie à boule." The latter was described by me at p. 542 of vol. i. of THE LANCET for 1870, and I simply introduce it here for comparison. Dr. Mallez claims for his instrument an easier introduction, on account of the tapering olive he has added to the bougie; but inasmuch as the ball-staff is for diagnosis only, I prefer Dr. Henry Dick's, as the greater sharpness of the base of its cone permits an increased perception in diagnosis of pathological alterations. These bougies are made of various sizes, but the most useful are those varying in size from a No. 6 to No. 10, English measurement, which enable us to detect incipient contractions long before they can be ascertained by any other instrument. For a knowledge of the value of these bougies I would refer the reader

to an article by me in the *British and Foreign Medico-Chirurgical Review* for July, 1867.

Fig. 4 represents the "bougie conique." At p. 454, vol. v., of the Dict. de Méd., M. Desormeaux in the following words states the value of these conical bougies: "Ces bougies sont, sans contredit, les plus utiles dans le traitement des rétrécissements, dans lesquels elles s'engagent et qu'elles dilatent mieux qu'aucune autre." I find from my own experience that these bougies are most useful in boring through, as it were, tight, narrow strictures, and enabling the case to be completed with the olivary bougies.

Fig. 5 illustrates the "bougie olivaire," already described by me in THE LANCET at the part referred to. This bougie is applicable to the treatment of the majority of cases of stricture which will admit a No. 4 or 5 English. Its great value is dependent on its olive, which prevents the point from lodging in the lacunæ of the urethra. It is also the only instrument which ought to be placed in a patient's hands; he cannot do any harm with it, the formation of a false passage being an impossibility even if the patient tried. As will be seen by the illustration, this bougie is the conical bougie *plus* the olive placed at its extremity. It was invented by Lioutt at the commencement of the present century, and obtained a prize at the Academy in Paris.

Figs. 6 and 7 represent respectively the "bougie conique à ventre" and "bougie olivaire à ventre." When we have dilated a stricture up to a large size, say No. 12 English, the patient often complains of the unpleasant distension of the meatus externus, which has once more become, as it ought to be, the narrowest part of the entire canal. Now, inasmuch as the shaft of these bougies is much smaller than the other part, we shall, if we use them, only subject the patient to an annoyance lasting for one second, instead of the prolonged inconvenience resulting from having a full-sized ordinary bougie in the passage for several minutes. The instrument dilates the stricture only.

Fig. 8 is a representation of the olivary whalebone bougie. Each end is similar to the other, consequently it will last as long as two bougies not similarly constructed. All bougies might be made double, as it were, by uniting them at the end of the shafts. These bougies can be obtained with ends smaller than a No. ¼ silver catheter, and they are of inestimable value, for they combine all the advantages of elastic instruments *plus* the special merit of stiff ones in those particular cases where the perineum is one solid mass of induration; the olive at the end prevents the formation of a false passage, which is quite possible if a tapering-pointed whalebone bougie be used. In cases of traumatic stricture these instruments are invaluable, as they are usually the only ones that can be got through.

Fig. 9 is the elastic filiform bougie, and is the smallest known; its point is necessarily conical, as its extreme tenuity will not admit an olive to be placed on it. Some idea of its size may be gained when I state that a No. ¼ silver catheter is equal to about six of these bougies put together. Not only is it most useful for treating all those cases of stricture which are absolutely impassable to any English instrument, but it will also obviate recourse to an operation in cases of retention of urine from very bad strictures, for if the bougie be passed and left in for a few minutes, urine will be found to flow on its withdrawal. The surgeon who has had no experience of this instrument will very naturally suppose that it will double up on meeting with an obstacle; but such will not happen if he takes his fingers off the bougie at every half inch of progress made, for if it cannot proceed further, it will spring back, thus giving the surgeon notice of its arrest. It must be wriggled in, rather than introduced in the ordinary manner.

Fig. 10 is Dr. Mallez's instrument for injecting powders into the urethra, as modified by me. I have made it a breech-loader, and so simplified its action. The instrument is useful for injecting various astringent powders into the anterior part of the urethra in cases of chronic urethritis.

I now come to two instruments which no surgeon ought to be without—M. Auguste Mercier's "sonde coudée" and "sonde bicoudée." The beaked catheter No. 11 resembles a lithotrite so far as its beak is concerned, which is placed at much the same angle to its shaft. This instrument is destined entirely to supplant the English metal prostatic catheter, and also the elastic catheter within a stylet; it never draws blood, and can be used either by the surgeon or patient in cases of retention of urine from enlargement of the third lobe of the prostate. But cases of difficulty often arise either from the extreme obesity of the patient or from the great extension of the floor of the prostatic urethra, and no ordinary prostatic instrument can be passed; for such cases M. Mercier's "sonde bicoudée" (Fig. 12) is invaluable. I believe it is practically unknown in this country.

Portman-square, June 29th, 1872.

CASE OF MALIGNANT CHOLERA TREATED WITH CALOMEL; RECOVERY.

BY WILLIAM BLOXAM, M.D.

W. P——, aged fifty, previously quite well, was seized on July 31st ult. with diarrhœa and vomiting, which continued all day. On the same night the vomiting and diarrhœa became incessant, the alvine discharge being colourless; and cramp occurred in every muscle, even in those of the face.

I first saw him at 9 A.M. on Aug. 2nd. The face was dusky and pinched; eyes hollow; voice whispering; tongue cold, with white fur; vomiting and purging constant, the latter of the characteristic rice-water matter. The skin was cold and clammy; respiration hurried; cramp universal and intense, so severe in the hands that he had grasped a large shell in either palm, fearing, he said, that should the hands once close he could not again open them. The pulse was barely perceptible at the wrist, very small, and could not be counted. The veins on the back of the hands were thread-like in size. No urine had passed since the night of Aug. 1st. Two grains of calomel were ordered to be put upon the tongue every hour from 9 A.M. to noon. He expressed much relief after the second dose; but the rice-water purging, vomiting, and cramp still continued very severe. The surface was warmer, and the veins of the hands had slightly increased in size. The dose was then given every two hours from noon of Aug. 2nd to 8 A.M. on Aug. 3rd.

Five visits were paid to the case on Aug. 2nd, and at 10 P.M. the alvine discharge became green, with white flakes floating in it. The vomit was also occasionally green. Equal parts of milk and water, cold, was the only diet; stimulants were strictly forbidden; warmth was applied to the epigastrium and extremities.

Aug. 3rd.—10 A.M.: Cramp much abated; vomiting and purging less; stools brownish liquid. To take two grains of calomel every three hours; to suck pieces of ice.

4th.—10 A.M.: Still better; motions semi-solid; slight retching; headache; no fever; pulse quiet; passed about six ounces of urine, dark-coloured, specific gravity 1010, very acid, slightly albuminous. Concentrated sulphuric acid gradually added produced first a bottle-green, then a deep-red, and ultimately a blackish colour. The calomel was now stopped, the patient having taken in all thirty-six grains. One or two doses, however, had been lost by vomiting, and no dose was given when the patient slept at the hour.

Remarks.—This, it is to be hoped, will prove an isolated case only; but it is one of such typical intensity in all but entire pulselessness that it serves to illustrate the plan of treatment which I have pursued in like cases, with like success, since the cholera epidemic of 1854. Having in the epidemics of 1849, 1854, and 1867 held public appointments, in which cholera and diarrhœa came particularly under my notice, I was induced to watch carefully the success of the various plans of treatment. Unhappily the immense pressure of work rendered it impossible to keep account of cases; but the general result was largely in favour of the treatment by calomel. In some cases the arrest of symptoms was immediate, particularly in those of very recent occurrence. Very rarely did ptyalism occur, and then only slightly. The consecutive fever was greatly lessened. I regarded the milk diet as absolutely essential, and have more than once seen a relapse from convalescence caused by simply eating bread. The increased fulness of the veins was always hailed as a good omen, and no doubt indicated that free endosmosis had occurred, and with it a better chance of recovery.

I do not desire to appropriate to myself the merit of first proposing the use of calomel in cholera, which chiefly belongs to the late Dr. Ayre of Hull; but I would earnestly urge upon

the profession a fair trial of calomel, in doses varying from a quarter of a grain to two grains, at intervals of from ten minutes to four hours, according to the severity of the case, and age and constitution of the patient; always with milk diet only, and never by any means giving either opiates or stimulants. This method has succeeded in infants at the breast and in the aged, and is applicable not only to confirmed cholera, but to those suspicious cases of violent diarrhœa and vomiting occurring at epidemic periods.

I have abstained from theorising upon a disease of which so little is yet known, but would observe that among the very large number of cases which have passed through my hands, those almost always did best where the diarrhœa and vomiting were urgent, and that many suddenly collapsed in which those symptoms were very slight, the intestines being found, on post-mortem examination, full of rice-water matter.

I strongly incline to the view that the success of the calomel treatment favours the "elimination theory."

Mount-street, W., August, 1872.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

CANCER OF THE TIBIA; AMPUTATION THROUGH THE KNEE-JOINT; RECOVERY.

(Under the care of Mr. BRYANT.)

THIS week we publish the third of Mr. Bryant's cases, the others having appeared on the 13th ult.

S. H——, aged fifty, a shoemaker, was admitted on the 22nd of April, 1872, with cancer of the left tibia. He stated that none of his relatives have ever had cancer in any form. His parents, brothers, and sisters have always been remarkably strong and healthy. Thirty-six years ago (the patient being then fourteen years old) he had a violent fit of shivering after bathing in a stream; he went home, feeling ill, and the following morning had a severe pain in the left leg. In a few days the right leg also pained him, and both legs swelled, especially around and just above the ankles. Abscesses then formed in both legs from the ankles to the knees; and the left leg, which was the worst, increased to an enormous size, becoming nearly as large as his body. They were opened by his medical attendant in several places, and discharged large quantities of pus. About two years after he was first taken ill a piece of bone, two inches long, came away from his right leg. After this numerous pieces came away from both legs, the largest being five inches long and one inch broad. Small pieces of bone have continued to come away from both legs until two years ago, when the last piece came from the left leg, leaving a wound over the front of the tibia. The wound did not heal as previous ones had done, but slowly increased in size. Sixteen months ago, the wound being very painful and bleeding a great deal, he went to the London Hospital, and was there six weeks.

On admission at Guy's he appeared to be in tolerably good health, but was rather thin. Over the front and inner side of the left leg was a large fungoid growth, measuring 5½ in. by 4 in., involving the bone and the superficial parts; it was considerably raised above the general surface, but had a very irregular appearance, presenting a number of soft papillary projections of a bright-red colour; it was covered with a thick layer of pus, which had a very offensive smell. Its margins were everted, and the skin was very red and inflamed for some distance around. The glands in the left groin were enlarged and indurated; those on the right side slightly so. Pulse 100; temperature 98·4°. The urine contained a large amount of phosphates, but no albumen.

On May 7th, the patient being under the influence of chloroform, Mr. Bryant proceeded to amputate the leg at the knee-joint. He first made an anterior rectangular skin flap, and then a posterior one of about the same length, but including all the soft parts; the joint was then opened from the front, but the patella was not taken away. Considerable difficulty was experienced in securing the vessels by torsion, one good-sized vessel causing a long delay; this was finally secured by a carbolised catgut ligature, which was cut off short and left in. The flaps were then brought together with silk sutures, the limb firmly strapped to a short back-splint, and the whole enveloped in a fold of cotton wool and secured by a bandage.

On the following morning the pulse was 120; temperature 103·3°; tongue slightly furred. He had slept for several hours during the night, and felt comfortable; had taken four ounces of wine and a considerable quantity of milk. On the 9th the pulse was 136; temperature 102·8°. On the 10th the pulse was 134; temperature 103·2°. He complained of a good deal of pain in the stump, which was also swollen. The dresser cut a few of the upper bandages, which relieved him. In the evening he was in so much pain that the house-surgeon removed the dressings, and found that there was a considerable swelling on the outer side of the stump, and the skin was red and inflamed. On the 12th two or three of the sutures were removed, and some pus escaped. Pulse 130; temperature 103°. On the 13th the remaining sutures were removed. The anterior flap looked healthy; it completely covered the condyles. The posterior flap had retracted about two inches, leaving a suppurating surface. The thigh was considerably swollen, especially on the outer side; when it was pressed, pus poured out from the stump. On the 16th the posterior flap had retracted still more, leaving an interval of about four inches between it and the anterior flap, exposing the posterior part of the condyle and the intercondyloid notch. Small granulations now appeared in places. There was a considerable discharge of very offensive pus, which appeared to have burrowed almost up to the hip; when pressed downwards, the pus ran from the stump. The anterior flap had sloughed through in one place, making a hole about one inch in diameter, exposing the inner condyle. On the 30th, an incision was made into the swelling about half-way up the outer side of the thigh, and about half a pint of thick pus escaped. On June 5th the stump was healing rapidly by granulation; but there was still a considerable discharge of pus both from the stump and the incision. On the 17th the stump was doing well; there was still a great deal of discharge from the incisions made in the thigh.

July 1st.—Patient is doing well; his general health has improved the last week or two; takes his food well, and sleeps better; he has also gained flesh.

Aug. 8th.—The patient has greatly improved in health since the operation. The stump is almost entirely healed. To leave the hospital in a day or two.

LONDON HOSPITAL.

INCARCERATED SCROTAL HERNIA; OPERATION; ARTIFICIAL ANUS; RECOVERY.

(Under the care of Mr. JONATHAN HUTCHINSON.)

THIS case presents many points of considerable interest. In the first place, it is a typical case of *incarcerated* hernia—that is, a hernia that is rendered irreducible by impaction of fæces. Another point is the fact that there was a total absence of strangulation, and yet the bowel was sloughy. Further, there was no vomiting and no constipation, but the prostration was extreme—so great, in fact, that at first the patient's life was despaired of. Lastly, we have the great relief following the operation, and the gradual uninterrupted progress towards recovery.

John G——, aged sixty-three, was admitted into the hospital on July 18th, with a large scrotal hernia on the right side, which could not be reduced. The patient has had a rupture on the left side for thirty-six years, and for many years he has had an occasional hernia, which he has always easily "got back," on the right side. Three weeks before admission, he became ill, and was confined to his bed; the bowels were costive, nodules of hardened fæces passing at every motion. About a fortnight before admission, the patient noticed that his right rupture had come down, but this time he was unable to replace it. This re-

mained, but there was no constipation, the bowels being opened forty-eight hours before operation. On admission, and for several days before, the patient suffered intense constitutional depression, and became feverish and very exhausted, but there was no vomiting, nor did he complain of much pain. When taken into the hospital, he was in a state of extreme prostration and collapse. The right scrotum was enlarged, swollen, tender, and of a dusky red hue.

Chloroform was administered and the sac cut down upon and opened. The tissues of the scrotum were found thickened and infiltrated; the hernial sac was distended with about half a pint of turbid, fetid serum, and large masses of recent lymph. The neck of the sac was quite free, and no constriction could be felt. At the upper part of the sac was a knuckle of intestine, which contained a mass of fæces of almost stony hardness, but which could be indented by firm pressure with the finger-nail. At the lower part of the knuckle was a small sloughy patch of about the size of a sixpenny piece, and from this point the intestine was incised for about an inch and a half, and then the hard fæcal mass (of about the size of two walnuts end to end) was turned out. After this about a pint of soft liquid fæces escaped. The bowel was then stitched to the margins of the scrotal wound, and an artificial anus thus established, all the fæces escaping through it.

On the day after the operation the patient complained of slight pain in the abdomen, but this was soon relieved by the application of poultices to the abdominal walls, and by the administration of opium in suppositories. He was ordered liquid diet and some stimulants. On the second night after the operation his temperature was 101·5° Fahr.; pulse about 100. Fæces passed through the artificial anus without pain, only flatus passing by the rectum.

Since then he has gradually improved, never having had a bad symptom, and is now convalescent, the greater part of the fæces passing through the natural anus.

KING'S COLLEGE HOSPITAL.

TUMOUR OF TIBIA; AMPUTATION THROUGH THE KNEE-JOINT.

(Under the care of Sir WILLIAM FERGUSSON.)

A. B——, a delicate-looking man, aged thirty, had been under observation with a tumour of the right tibia for the last seven months. The growth commenced between eight and nine months ago as a swelling from the front of the tibia; it gradually increased in size for several months, but then took on more rapid growth, the limb increasing an inch and a half in circumference during the last three months, until it formed a large mass of irregular consistence, extending downwards from about two inches below the head of the tibia, and taking in about seven inches of that bone. It appeared also to embrace the fibula, which at first was quite free. The greatest circumferential measurement was twenty-two inches. The skin was distended, but of normal colour, the veins being only slightly increased in number and size. The operation was performed in the following manner:—

Chloroform being administered, the artery was compressed against the pubis by means of the thumb. An oblique incision was then made through the skin from above downwards and backwards for about two inches on each side of the limb opposite the upper part of the tumour; the lower ends of the incisions were then united by a transverse cut above and below. The anterior skin flap thus made was then dissected back, the limb flexed, and the joint opened, the ligaments divided, and the knife carried behind the joint, cutting outwards and downwards to form the short posterior muscular flap. A few vessels were ligatured with whipcord, and the flaps brought together by silk sutures, and supported by means of pads of wet lint covered with oiled silk and a bandage.

Sir William remarked that when the tumour was first seen it was so small that no opinion could be given as to its nature, except the opinion founded on the experience that tumours of the tibia, not venereal, will probably increase in size. It would be impossible to say whether it is benign or malignant; the first impression is that the tumour is malignant. From an early period it was evident that nothing short of amputation would be of any value. If the tumour were in the fibula, the whole or a portion of that bone might be removed; but not so in the tibia, and especially in a case like this, where the growth affected the whole thickness of the shaft, and probably began from its interior. Amputation through the knee-joint seemed to be a justifiable operation in this case. This operation, which was formerly rare, has now become more frequent, owing largely to the advocacy of Mr. Carden, of Worcester. Whether it is a good operation remains to be seen; but Sir William thinks it is. Further, this would seem to be a good case in which to employ it; for the disease is entirely limited to the tibia, and if the growth be not positively malignant it will not recur. But it does not necessarily follow that if there be a tumour of a bone, the whole of the bone must be removed, as some surgeons think, and Sir William has again and again protested against such extreme measures. The anterior flap was sufficiently long to give a good covering to the end of the femur, and did not necessitate the removal of the patella, which remained *in situ*, so that the part of the joint opposite and above that bone was not exposed. It is a moot point whether the patella should remain or not. Should the cartilage be removed? In this case it was not, and this is perhaps the best practice when it is healthy; for then there is little fear of absorption of septic matters from the wound, as may happen when the cancellous tissue is exposed. The stump, as far as could be judged, was a good one. But the operating-table is not the place from which to judge a stump; it is when the limb is used, three, four, or six months after, that we must form our opinion.

WESTMINSTER HOSPITAL.

A CASE OF CONGENITAL DISLOCATION OF THE PATELLA OUTWARDS.

(Under the care of Mr. HOLTHOUSE.)

DISPLACEMENT of the patella outwards is the most common of those to which this bone is liable, and may result from blows, or from twists of the limb, or from muscular action. Some persons seem to be particularly prone to this accident, and it has been observed to occur most frequently in those who are knock-kneed. The late Mr. Skey had seen two cases which occurred spontaneously during sleep, but, as far as we know, a case of congenital dislocation has not hitherto been recorded.

The subject in this case was a little boy, aged seven, who was admitted into the hospital on the 7th of May, with fracture of the left thigh at the junction of the middle and lower third, caused by getting the limb between the spokes of a cart-wheel while in motion. Next day, after the fracture had been put up, Mr. Holthouse observed while measuring the limb that the patella of the uninjured limb occupied an abnormal position, being partly dislocated outwards, so that its inner articular facet rested on the outer condyle of the femur, and on flexing the knee-joint the displacement became complete. In the injured limb the patella was in its proper position, and on neither side was there any inclination of the knee inwards.

According to the statement of the boy's mother this abnormal position of the patella had existed from birth, and originally both bones were displaced, but the left patella had been reduced by the mother and kept in place by compresses and a bandage. It is further remarkable, if this was really the case, that the boy had always been able to run about and play as other boys, both he and his mother declaring that he was not more liable to fall or less firm on his feet than other children of similar age.

Two casts have been taken of the knee, one with the limb flexed, the other with the limb extended, and are now in the museum of the hospital.

ROYAL FREE HOSPITAL.

THE following operations were performed by Mr. GANT on the 10th instant.

TWO CASES OF HIP-JOINT DISEASE; EXCISION.

Henry W——, aged sixteen, a delicate-looking lad, had suffered from disease in his left hip-joint for over nine months. The left thigh was flexed, and only slightly movable at the joint. At the inner and fore part of the thigh

was the opening of a long sinus leading to the joint. The great suppuration was so weakening the patient that excision was performed. A vertical incision being made along the great trochanter, this was crossed by a horizontal one at the upper part. The tissues were then dissected off the trochanter, and the capsule of the joint exposed and divided. The limb was then strongly flexed, adducted, and rotated inwards for the purpose of turning out the head of the bone; but, as this failed, the tip of the great trochanter was sawn off, and the neck of the femur then sawn through. A great portion of the head of the bone was now removed from the acetabulum; but, on passing the finger into this cup, a large sequestrum, consisting of a shell of bone of considerable thickness, was found, and, of course, removed. The acetabulum was perfectly healthy. A small quantity of carious bone was then gouged out of the great trochanter. The wound was washed with cold water, the lips brought together by silk sutures, and supported by strips of lint soaked in carbolised water (1 in 40), and a spica bandage. No splint was applied; but the patient being removed to bed, sandbags were then placed down the limb on each side, and one was put across the thigh to steady it.

The second case was that of a strumous-looking boy aged six, who had suffered from disease of the left hip-joint for about nine months. In this case, on account of the great swelling and suppuration, Mr. Gant opened an abscess at the posterior part of the joint, about the beginning of July last. A large quantity of pus was let out, but the patient did not improve in health; in fact, he got worse. It was therefore determined to make a careful examination of the condition of the joint, and, if necessary, to excise it. This was accordingly done on the above date. The operation was performed in a manner similar to the above; but in this case the acetabulum was mainly affected. After the diseased bone was gouged out, the wound was brought together and supported as in the former case.

It is interesting to note that in the former case, where the disease was femoral, the sinus opened in front, but in the latter, where the disease was chiefly acetabular, it opened behind.

DISEASE OF THE KNEE-JOINT; EXCISION.

Sarah A——, aged fifty, had suffered from disease of the left knee-joint for over twenty years, but for the last seven months it had been much worse, the pain in the joint and the startings in the limb preventing her from sleeping, and interfering with her health. Various modes of treatment were tried, both in this hospital and at others, but without any benefit. Mr. Gant, therefore, determined, notwithstanding the patient's age (which, perhaps, is the greatest at which excision of the joint has been performed), to excise the joint. The joint was swollen, the bones thickened and nodular in places, the patella quite immovable, the tibia and fibula dislocated backwards and upwards, and but slight movement of the joint could be effected.

The operation was performed in the following manner:—An incision was made from the outer side of the joint extending downwards below the patella, across the front of the limb up to a point on the inner side opposite that on the outer side from which the incision was commenced; the front of the capsule being divided, the limb was forcibly flexed, and thus the whole of the interior of the disorganised joint exposed. The extensive union between the whole inner surface of the patella and the front of the condyles was next sawn through, so that the lower end of the femur might be more readily removed. About an inch and a quarter of the condyles were then removed, and from one half to three quarters of an inch of the head of the tibia; lastly, the patella was dissected out, and some carious bone being gouged out of the head of the tibia, the wound was cleaned, the limb extended, and the ends of the bones placed together. Next, a back-splint extending from the upper part of the thigh to the hollow at the back of the heel was firmly applied, then a side-splint, with a foot-piece, and iron hoops opposite the joint, was bandaged on to the limb. Having ascertained that the ends of the bones were in close apposition, the wound was closed by means of silk sutures, and over this lint soaked in the carbolised water was applied.

CHOLERA has reached Cracow, and is increasing in virulence in Galicia.

Reviews and Notices of Books.

Lehrbuch der Geburtshülfe mit Einschluss der Pathologie der Schwangerschaft und des Wochenbettes. Von Dr. KARL SCHRÖDER, ordentl. offentl. Professor der Geburtshülfe, und Director der Entbindungsanstalt an der Universität Erlangen. Mit 26 in den Text gedruckten Holzschnitten. Dritte neu durchgearbeitete Auflage. Bonn: Max Cohen und Sohn. 1872.

DR. KARL SCHRÖDER, the Professor of Midwifery and Director of the Lying-in Asylum in Erlangen University, enjoys a high reputation among contemporary gynæcologists. His critical researches on the diagnosis of "hæmatocele retrouterina" in connexion with a case of uterus and vagina duplex with atresia and suppression of the menstrual discharge of the right half, his clinical observations on pregnancy, labour, and the puerperal state, and his great popularity as a teacher and lecturer, give to his every publication an interest and an attraction which subsequent perusal invariably justifies. The treatise before us is perhaps the most comprehensive book on its subject, while its acceptance among his countrymen may be inferred from the fact that in less than two years two large impressions have been exhausted and a third is already wellnigh bought up.

Without professing to meet a felt want, Dr. Schröder claims for his work certain features peculiar to itself and advantageous to the student. Bearing in mind his function as a teacher, he has refrained from overloading his exposition with records of cases or citations from other authors, and supplies the reader with just so much instruction as will enable him to think for himself and form an independent judgment. "The main task of scientific culture," he contends, "lies in giving the student an incentive to original thought." Nothing can, in his opinion, be more objectionable than the exhaustive treatment of elementary facts in a text-book, and the summary excision of controverted matters. The elementary should of course be so presented as to be intelligible (but even in this case within the briefest compass possible), while the non-elementary should always be indicated in such a manner as to impress upon the student that much remains for him to attack after he has conquered the ground requisite for practice. Let him find in this, the non-elementary department, the stimulus to independent thought and original investigation. "Ein Lehrbuch für Studirende ist eben kein Lehrbuch für Hebammen." (A text-book for students is not a text-book for midwives.)

So far does he carry out the principle of withholding the non-essential, and keeping elementary detail within the shortest space, that he omits the anatomy of the pelvic bones and the description of the genital organs. This innovation on previous exposition he justifies by the remark, that however useful the discussion of such points might have been in Deventer's day, and even at the beginning of this century, yet, in view of our excellent anatomical text-books, and the thorough grounding now given to students in anatomy, a treatise on midwifery may easily assume such knowledge on the part of the reader. In fact, he does what the writers on medicine and surgery do, who withhold the descriptive anatomy of the internal viscera on the one hand, or of the external limbs with their relations on the other. Again, while he everywhere seeks to observe, as far as possible, the now established division of medicine proper into physiological and pathological departments, he has not scrupled to deviate from this arrangement in certain cases.

The various conditions of the blood, as being of the highest practical importance, he has treated under common points of view, although they originate in various and

(scientifically considered) widely distinct sources. A further deviation from the received method is his treatment of the narrow pelvis, which he has divided into two arbitrary sections—viz., the "usual" and the "less usual" forms of that condition. This he has done because the former are almost the only class which have importance for the practitioner, and may be considered well enough under common points of view; while the latter exclude themselves from such consideration by their peculiarity. A further reason for this course he has found in the experience that under the received method the learner gets no conception of the very different practical importance of the several forms of pelvis—that, for example, he relies on his knowledge of the anchylosed diagonally narrowed pelvis, while he has little clear perception of the rachitic, and knows almost nothing of the most frequent form of narrow pelvis—viz., the flat, non-rachitic form.

In the pathology of labour Dr. Schröder has so innovated on the traditional method as to take the most important group of puerperal disorders and consider them together from a purely etiological point of view—that of septic infection. The superlative importance of puerperal fever seems his justification for preferring the unique consideration of the diseases produced in lying-in women by infection to a pathologico-anatomical classification of the fever itself. Moreover, Dr. Schröder, rightly regarding personal instruction on the living patient as the only means of successfully teaching obstetrical operations, has limited his description of these to the shortest space, and, for the same reason, has thought it unnecessary to describe the obstetrical instruments in common use.

One important feature in Dr. Schröder's treatise is the historical survey he gives of his subject. At every stage of the reader's progress he is reminded of what have been the steps by which the present scientific standpoint has been reached. This Dr. Schröder has done with scholarly tact. Osiander and Siebold are the chief authorities in this department, and though their *ipsissima verba* are here and there given, the reader must not think that Dr. Schröder has not read the originals for himself. Indeed, he shows a command of medical literature, ancient and modern, which points him out as pre-eminently fitted to continue, if not to rewrite, the well-known work of Sprengel. Of the vast collection of monographs on obstetrics he has cited only the more valuable; while the larger works he refers to will themselves supply the information he withholds. Medico-legal proofs he gives but sparingly; and among the references on obstetrical subjects generally, he places the German literature first, the English second, the American third, and the French last. He might, we think, have included the Italian, and put it before the French.

We have touched on the chief characteristics of Dr. Schröder's treatise; a more detailed analysis of its various sections we have not the space to give. The reader, however accomplished in the obstetric art, will thank us for directing him to so acute, candid, and sound-headed an expositor as Dr. Schröder. Everywhere we see the beneficial influence on the author of that great physician, Dr. Veit, who (we notice incidentally) was Dr. Schröder's teacher. The pupil has imbibed much of the scientific caution, the practical keenness, and the lucid exposition of the distinguished light of the school of Bonn, and bids fair to perpetuate the honour, already conspicuous, which has been achieved in obstetric medicine by that noble seat of learning.

OUR LIBRARY TABLE.

Constitution and Ethics of the Profession. By A GRADUATE. London: Published for the Author by the Publishing Company (Limited). 1872.—This work is a pamphlet, and intended to be preliminary to a larger work. It goes very deeply into the composition of the profession as made up of different grades, and of members with different qualifications of the most various merit and significance. It suggests various changes—e.g., the fusion of the medical and surgical colleges, and all medical schools unconnected with the Universities, into separate medical universities, or into three branches of a great university of medicine; new medical qualifications; grades of practitioners; characteristic dress on public occasions; the appointment of a "family physician" in each county, to hold a place in the county or diocese like that of a bishop over the clergy; changes in the Medical Council; uniform fees; changes in regard to public medical institutions and the officering of them. The grades of the profession would henceforth be: 1, the Consultant; 2, the Family Practitioner; 3, the mere Licentiates of the State, including (*a*) what is called the Junior Family Practitioner; (*b*) Medical Officers of the Army, Navy, and Indian Services on first joining, &c. All we can say in reference to such a complete re-casting of the profession is that the author must be as inexperienced in medical reform as he is ingenious in devising it. If he will try to bring about but one of the most reasonable and slight changes he recommends, and thus buy experience of the difficulties to be overcome, we shall give more serious attention to his scheme as a whole. "A Graduate," however, will be glad to receive suggestions addressed to him at his publishers'. He is evidently earnest in his work, though he will have to attempt less if he means to do anything.

Les Ambulances de Paris pendant le Siège. Par M. AL. PIEDAGNEL. Paris: Jouaust. 1872.—The author of this excellent little work applied himself during the long months of the siege of Paris to making statistical observations on the system of relief for the sick and wounded. He visited ambulances of every kind, whether of French or foreign establishment, in the churches, palaces, hotels, theatres, and private houses, noting down his daily impressions, collecting valuable information, and setting in a vivid light a mass of incidents at once interesting and sad. His book is something more, however, than an animated picture of the *tout ensemble* of the ambulance system. He gives minute details of the organisation of these institutions, describes the functionaries attached to them, the means at their disposal, and the results they achieved. The volume will embalm the remembrance of an undertaking which, throughout their ordeal of trial and tribulation, reflected on the Parisians their highest claim to honour.

The Royal London Ophthalmic Reports, and Journal of Ophthalmic Medicine and Surgery. Edited by J. C. WORDSWORTH and J. HUTCHINSON. Volume VII. Part 3. July, 1872.—The present number of this excellent monthly periodical contains several interesting articles. Among others we may mention Mr. Jonathan Hutchinson's Report on the Forms of Eye Disease which occur in connexion with Rheumatism and Gout. Mr. Hutchinson deprecates the growing tendency of pathologists to ascribe obscure morbid phenomena to syphilis, and believes that many cases of iritis treated as syphilitic are really rheumatic iritis, and that the arthritic diathesis is far more common than is generally supposed. Mr. Hutchinson supports his view by copious tabulary extracts from standard authors, and from his own case-book. The remaining papers are by Mr. Lawson, Mr. Cowell, and Mr. Nettleship.

Practical Suggestions in Naval Hygiene. By ALBERT LEARY GIHON, A.M., M.D., Member of the Naval Medical Board. Government Printing-office, Philadelphia.—Under this title a work of 150 pages, containing in condensed form the most advanced doctrines of hygiene applied to ships, has been

issued from the United States Navy Medical Department for the guidance of its officers. It enunciates common-sense views on most matters of naval discipline and questions of social reform within the service itself; and displays an entire freedom from reserve on topics that might be deemed too delicate for handling by any but official hands. The work abounds throughout with clear, practical teachings on all the main causes of disease among seamen, and with suggestions on the means of counteracting and preventing their results; and many of its strongest and most pertinent illustrations are drawn from the data of our own navy. Wanting a work of the kind to assist our naval medical officers in judging on difficult questions, it would be well for the naval service if a reprint were to appear in an English dress.

First Easy Latin Reading Book. By the Rev. EDMUND FOWLE. London: Longmans. 1872.—So numerous and so well-devised are the helps to the schoolboy in Latin that (much as his time is now claimed by other not less important subjects) he has only himself to blame if he does not soon become fairly proficient in that language. Mr. Fowle's book is a favourable specimen of its class, giving aid to the learner only when absolutely required, and withholding it when it would merely encourage idleness. His method is original, but it has stood the test of his own wide experience, and is available equally for the schoolroom and for private tuition. His mode of spelling Latin words, however, is decidedly antiquated. Such forms as "conna," "concio," and "lacryma," are behind the time.

The Westminster Review. New Series. No. LXXXIII. July, 1872. London: Trübner.—The current number of the *Westminster* contains an article of interest to medical men, entitled "Recent Experiments with the Senses." It gathers up the results of recent experiments and observations of physiologists in this direction, more especially those of the German school.

ARMY MEDICAL REPORT FOR 1870.

No. II.

IN our last article we examined, in a very general and cursory manner, the contents of this Report, and we now proceed to analyse some of the various papers more in detail. There is not much to detain us in the "Sanitary Reports" for the home stations of the army. Dr. Beatson, C.B., in that for the hospital at Netley, gives the total number of admissions into that institution for the year as 3391, of which number 3200 were invalids from foreign stations, 2035 of whom arrived from India by the overland route, and 472 by the Cape. The highest number in hospital on any one day was 925, but the daily average was 392. Some remarks made in previous reports as to the necessity for married quarters being built near the hospital for a certain number of the senior medical officers, are reiterated in this. A resident medical officer, and not a visiting physician, is certainly required for the lunatic asylum, and we are glad to learn that this is to be immediately met by the erection of a medical officer's quarter. The average daily number of lunatic patients at Netley was 64; but this represents only a very small section of the total number of this class of patients, a considerably larger proportion being confined at Bow. We understand that, of late years, the prevalence of insanity has much increased in military life, owing probably to the large force stationed in India, from which a considerable proportion of the cases, and especially of the more excitable patients, are derived. Sunstroke, either singly or combined with other causes, seems to be a very fertile source of insanity among our troops serving in tropical climates.

At Malta and Bermuda, intemperance is specially dwelt upon as a very common cause of the diseases and mortality among soldiers at those stations. We have observed that the state of many of the military buildings in the former command has formed the subject of comment for many years; and the report of Inspector-General Paynter, C.B., amounts to a general condemnation of the barracks and all belonging thereto. Dr. Bowen is of opinion that nearly 25 per cent. of the deaths at Bermuda, besides much of the sickness, during the year, were due to the excessive use of ardent spirits; and he regrets that beer cannot be supplied at a low rate to the soldiers. There is a long report on the sanitary condition of the Mauritius and the nature and progress of the sanitary works that have been undertaken in that island—which, by the way, remains to this day a very unhealthy station for European troops. Dr. Small states that no part of the coast-line was free from fever, and from the sea-level to 800 feet above it no one can be considered safe from its attacks. The primary object of a hospital is the cure of the patients; but that at Port Louis appears to originate diseases among those resident within its walls. Patients have to be discharged before they are cured of the diseases for which they are admitted, in order to avoid their contracting malarious fever. Whatever disease causes the admission, all the sick in hospital have to get quinine regularly, to protect them against the effects of the malaria.

The principal medical officer at Ceylon reports that dysentery, diarrhœa, and diseases of the digestive system continue to be frequent amongst the European troops. These diseases were very common, and of a particularly fatal type at Colombo; and in every one of the six fatal cases that occurred there the post-mortem examination revealed hepatic abscess. Of these cases two were returned as dysentery and two as diarrhœa. Besides these fatal cases of abscess of the liver occurring at Colombo, three of the invalids who were sent to England from the same station in December were supposed to be suffering from that disease, thus giving the head-quarter station of the command an unenviable pre-eminence in producing fatal liver disease.

From Bengal we learn that in the Peshawur district there was a great prevalence of paroxysmal fevers. Upwards of three-fifths of the whole number of cases were admitted during the last quarter of the year. The admissions for these fevers at Peshawur amounted to 18·98 per 1000 of the strength of Horse Artillery. In the Lahore division, the 85th regiment at Meean Meer furnished a very high proportion, the admissions during the year having been double the strength. Dr. Muir, C.B., in his sanitary report, says he felt it his duty again to bring this unhealthy station under the notice of the Government, with the view (if practicable) of having the European garrison there further reduced. "The Commander-in-chief had one battery of Royal Artillery withdrawn during the unhealthy season to Campbellpoor. Cherat, as formerly stated, has also been largely utilised with the same object in view; but it is still much to be regretted that military necessity should demand such a sacrifice of health and life, as service in that deadly valley, year after year, almost certainly entails." The same authority tells us that an opinion seems to have got abroad, especially in England, that the European troops in India are very indifferently supplied with water of a pure and wholesome quality, and that much of the disease to which they are subject is directly traceable to this source. Dr. Muir believes this to be an exaggerated view of the case. With few exceptions, he states, the supply is adequate and wholesome. One of these exceptions, we presume, is Peshawur, for he observes that the Government has sanctioned a grant of money for the purpose of drawing water off at the head stream of the Bara, and conveying it to the station in pipes.

The "Appendix" opens with Professor Parkes's Report on Hygiene for 1871, which does not admit of being condensed. He gives some very clear instances of the spread of typhoid fever by water, some short remarks on the German food supplies during the late war, chiefly founded on information from Dr. Roth, Sargeon-in-chief of the Saxon army, besides collating facts bearing upon the use of alcohol and its effects, and other subjects. Neither Professor Parkes nor Professor Maclean appears to have much faith in the recent "chill" theory of malaria, or that it is to

supply an answer to the query "What is malaria?" There is a short account of the outbreak of cholera in Konigsberg which is worth reading; and some interesting observations on marches, knapsacks, and war hospitals.

Surgeon-Major Mackinnon, C.B., reports on the operations performed at Netley during the years from 1867 to 1870. This is a good practical paper, several portions of which we had marked for quotation or comment, but we can only select a few of these. Mr. Parry, now a retired army officer, was well known to most army men as a skilful surgeon and dexterous operator. He originated a method of performing amputation at the ankle-joint, which is naturally a favourite in military practice, and appears to answer very well. The advantages claimed for it are that it is more easily performed than Syme's; that it gives a better stump, more of the tissues of the heel being left than by any other method yet proposed; that there is very little danger of wounding the posterior tibial artery; and, lastly, that there is a very ready escape for the discharges, the chances of "bagging" being avoided. The method of performing this operation is described at length by Dr. Mackinnon at page 358. In the cases in which it was had recourse to at Netley it appears to have succeeded admirably. Several cases of lithotomy are recorded. These present no special points of interest. In one case the patient had suffered from symptoms of stone for more than twelve years, but we suppose that as he was only twenty years of age he could not have been long under the observation of any medical officer. Excision of the elbow in some cases of unreduced dislocation succeeded in giving the patients useful limbs. In a case, however, where partial excision was performed by a surgeon, the condyles of the humerus not having been removed, this could scarcely be said to have been the case. Flexion was very limited, owing to the bones of the forearm being obstructed by locking against the condyles of the humerus. This case is an example, says Dr. Mackinnon, of partial success from insufficient removal of bone. "In removal of the elbow-joint it is particularly necessary to take away bone unsparingly." In cases of resection of the elbow treated at Netley, no splints of any kind have ever been used in the after-treatment. The limb is laid on pillows in a semi-bent position for about a fortnight or three weeks, and, as the healing process progresses, passive motion is gradually and carefully carried out. This mode of treatment has been found successful, and the condition of the joints, after healing had taken place, showed that the use of splints in the after-treatment of resection of the elbow-joint is unnecessary—at least, such is Dr. Mackinnon's experience from the cases operated on at Netley. The most interesting and instructive case among the operations is an example of Liston's excision of the wrist. The wrist-joint was excised on June 3rd, 1868. The whole carpus except the pisiform bone was removed, with the ends of all the metacarpal bones and about one inch of the lower ends of the radius and ulna. The cut end of the radius was found diseased, so half an inch more was taken away, a space of three inches being thus left between the radius and the metacarpus. No vessel was ligatured. The incisions were mopped out with carbolic acid and linseed oil (1 to 10), and lint soaked in the same solution was introduced into the wound to support the tendons. Sutures were applied along the radial incision, and one at either end of the ulna, and the limb then put on a Liston's splint. The several joints of the fingers *were freely manipulated* before his removal from the table. The patient was discharged from the hospital on the 20th April, 1869, with a very useful and symmetrical hand, which retained the power of flexion and extension, eversion and inversion, pronation and supination, and its strength so restored that he could raise with fairly outstretched hand a barrack scuttle full of coals weighing nearly seventy-seven pounds. The new wrist was quite strong and firm, and almost in all respects equal to the other. For further details, and the results of the measurement of the new wrist, the reader must refer to the report itself. Among the amputations there was one through the knee-joint (disarticulation). The stump is described as having been most satisfactory. An artificial leg could be easily adapted. There was no wasting or atrophy of the thigh muscles, which proved on measurement equal to those of the sound limb. In this operation the cartilages on the end of the femur and the patella are not interfered with (if sound), and it therefore differs materially from that of Syme or Carden. Dr. Markhoe, an American surgeon, appears to have had considerable experience of the operation, and speaks highly of it, and one of our London hospital surgeons does the same.

We have scarcely space left to examine all the other papers, and must content ourselves with a curtailed description of some of the more noteworthy. Surgeon-Major Fitzgerald describes, in a concise clear style, the organisation of the Field Medical Service of the Prussian Army. This paper will be useful for future reference, for which alone it was manifestly intended. It is followed by another contribution from the same source on Battle-field Surgery, including the general and sanitary treatment of wounds. The late and existing rules of the Prussian Service in regard to amputation are described. The mortality of amputations at various periods after the receipt of injury is dwelt upon, and early amputation is strongly enforced. Mr. Fitzgerald considers that surgeons should not wait for reaction. In speaking of what he had observed during his visits to various French and German hospitals of the very different results following in cases of early and late amputation, he says that in the same hospital were frequently seen men who had undergone amputation on the field steadily progressing towards convalescence, making rapid and good recoveries, whilst in the neighbouring beds were other men who had been injured in the same engagement, but had not been operated on until some days later, sickening and dying, or with the prospect of a prolonged course of hospital treatment. Cases of amputation performed very early, before reaction, seemed very often to escape pyæmia. To undertake an important operation from the third to the fifth day is often to consign the patient to the grave. As regards the methods of amputating, the German soldiers usually preferred the circular. The best plan is considered by Mr. Fitzgerald to be that of flap through the skin and circular through the muscles. His remarks on the very frequent occurrence of pyæmia among the wounded, and the very different conditions under which it arose, its possible connexion with hospital miasm, from suppurating surfaces and decomposing organic matter, and infected clothing, instruments, &c., and the constitutional states of ill-health observed in persons engaged in personal attendance on the wounded—such as dressers, nurses, and ward orderlies—open out subjects for a good deal of discussion. Picked oakum is highly spoken of as a dressing for wounds, and the necessity for extreme cleanliness, the periodical evacuation of wards, and attention to preserving artificial warmth during the prevalence of cold weather, are all dwelt upon. The report of Inspector-General Lawson on the medical arrangements for the last autumn manœuvres is chiefly interesting to army surgeons. One of the most carefully prepared papers in the volume is, undoubtedly, that by Assistant-Surgeon Welch, the Assistant Pathologist at Netley. It represents a good deal of hard labour, and is well worth reading; but we think it would be more generally read if the style adopted by its author were simpler and easier. Coming so soon after Dr. Wilks's Address in Medicine, it does not form by any means a bad rider to his remarks in relation to associated abnormal structure, and the difficulty of adapting the mortality nomenclature to the true pathology and morbid anatomy of the diseased frame. The subject discussed is Syphilis and the various lesions—and their name is legion—induced by that disease in the soldier.

We are reluctantly compelled for the present to pass over the reports of the medical and surgical divisions, and an interesting paper by Professor Longmore on a curious case of supposed ocular disease.

THERAPEUTIC TRADITIONS.

No. VI.—"COOLING" REMEDIES (CONTINUED).

IN resuming the thread of our remarks* on remedies which reduce an abnormal bodily temperature, we have to deal this week with a class of agents which it would *a priori* seem absurd to credit with any such effects. Nevertheless Food in general, and alcoholic food in particular, may be

* Vide THE LANCET, May 4th.

demonstratively proved to exert as distinct an antipyretic influence in appropriate circumstances as any substance in the Pharmacopœia.

The principal source of the popular feeling of incongruity between nourishment and cooling is the prevalence of those physical theories as to the powers of life which marked the early days of physiological chemistry. From the moment in which it became clear that the most extensive and all-pervading influence in vital processes was *oxidation*, life seemed essentially a fire of which food was the fuel. Then came the theory of Liebig, with its division of aliments into "flesh-formers" and "heat-formers"; the latter class including all the hydrocarbons and hydrates of carbon (i.e., all the starchy, the saccharine, the fatty, and the alcoholic substances); while the former included the nitrogenised or protein-containing substances, which were supposed to repair the perpetual waste occasioned by the destruction of muscular tissues in the performance of muscular work. It is not easy to realise* how completely this theory—the illustrious author of which still lives—has become a thing of the past; how thoroughly the standpoint of physiologists has shifted in respect to the whole question of nutrition. The idea that an incessant and rapid tissue-exchange is the source of muscular energy is completely set aside; it being now obvious that except for the purposes of the growing animal, a minimum only of protein-containing food is really required. Thus everything tends to heighten the importance of the direct production of energy from the decomposition of food in the organism, and seems to favour the assumption that the specially combustible foods must immediately and sensibly increase the heat of the body. The assumption is nevertheless entirely unwarranted, as a somewhat closer consideration, both of probabilities and of observed facts, will show.

First, as to the theoretic probability that an oily and saccharine fluid like milk, or a starchy substance like arrowroot, or a liquid hydrocarbon like alcohol, will immediately generate heat which will be evident by the thermometer in the axilla or rectum. Be it remembered that heat, as such, is only one of the modes of energy developed in the organism, and that the necessary vital work of the body rather consists of *motion* (muscular, secretory, &c.), though all this energy (in accordance with the modern doctrine of the correlation of forces) can be expressed in terms of heat. Again, we would recall to the readers of our former papers,† the experiments of Röhrig and Zuntz, which show that a large proportion of the bodily heat which becomes sensible to the thermometer is the expression of changes going on within the voluntary muscular system; while, on the other hand, we know from the accumulated and decisive evidence of Fick and Wislicenus, Frankland, Haughton, Parkes, and Voit, that it *cannot* depend on the direct destruction of muscular fibre. Yet it is distinctly the correlative expression of so much work done; for it appears that we need only paralyse the motor nerves supplying the voluntary muscular system, and this source of sensible heat is at once cut off, as is proved by a very notable fall of the thermometer. The remaining sensible heat of the body is produced in the interior of involuntary muscles, of glands, of nerve-centres, or as the result of friction within bloodvessels. Here, however, no less than in the voluntary muscular system, it is probably always the expression of work done (motor, secretory), not of mere pabulum converted. In short, it would appear that in health, at any rate, the first results of the assimilation of food are not likely to be the production of free heat to such an extent as could be appreciated by the thermometer.

Nor are these theoretical probabilities contradicted by the most carefully observed facts which we possess. The most thorough investigations of the subject with which we are acquainted are those of Bärensprung, Ogle, Jürgendsen, and (especially) Ringer* upon ordinary food; and a careful comparison of all these must lead any unbiased mind to the conviction that the course of bodily temperature is in no way influenced by such food, save in the instance where previous fasting or some other depressing cause has produced a *subnormal* temperature, which, however, does not occur until the health is seriously impaired. With regard to alcohol, the substantial agreement† of nine-tenths of the observers who have studied the subject may be considered, even in opposition to a single illustrious objector—Dr. Parkes—to prove that the influence of alcohol upon temperature, except when this is subnormal, is uniformly in the direction of *lowering*, particularly when it is given in narcotic doses. [The present writer has reason to add, from his own researches on this subject, that moderate doses of alcohol compare, on the whole, very closely, in their effects on the temperature of healthy persons, with that of ordinary food; that the latter not unfrequently appears to cause a fractional *fall of temperature;* that alcohol (in ordinary dose) does this a little more decidedly, but not constantly; that, on the other hand, alcohol in narcotic dose produces a very substantial lowering influence. Indeed, he is strongly inclined to believe that the following statement, paradoxical as it may sound at first hearing, is literally true: that the more swiftly oxidisable a food is, the less likely is it to give occasion to the direct development of free heat, and the more likely to produce a positive fall of the thermometer when given in excessive quantity in health. In this view alcohol, for healthy persons, would simply be regarded as the most oxidisable of hydrocarbonaceous foods, though, unfortunately, it has other properties, of a destructive kind, when taken in continued excess.]

Such being the state of our knowledge with regard to the action of food and alcohol in health, we have now to consider both theory and observed fact as regards their influence on *morbid excess* of temperature. In pyrexia, as is well known, the incidence of the bodily chemical changes is greatly altered: the elimination of nitrogen proceeds as before, but is now derived in great part from the destruction of nitrogenised tissues instead of the destruction of nitrogenised food; and this kind of process results in the development of a far larger proportion of energy *in the condition of free heat* than is produced by the conversion of food in time of health. Under these circumstances there appears no theoretic reason why food, provided it be readily oxidisable, should not form an efficient protection to the tissues, and a consequent depressor of febrile heat: and, in truth, such objections to its use as really exist are mainly accidental—*e.g.*, certain foods cannot practically be given because the fevered stomach refuses to do the work of primary digestion upon them. Two forms of food, however, are rarely embarrassing to primary digestion in pyrexia, except where the stomach is itself inflamed—viz., milk and alcohol. The almost unlimited use of milk is possible in many forms of pyrexia; and milk, either alone or combined with starch (in the form of arrowroot, &c.), frequently affords a striking instance of a food which lowers morbid temperature. The present writer has frequently seen (as others doubtless have) a typhoid fever patient experience a remarkable reduction of temperature

* To this day, in fact, amateur lecturers at Mechanics' Institutes and festival meetings always repeat the old story of flesh-formers and heat-formers.

† Vide LANCET, April 6, p. 473.

* Proceedings of Royal Society, 1868.

† Cunibert Bouvier (Pharmakologische Studien über Alkohol; Bonn, 1871), has marshaled this evidence with striking effect.

and simultaneous amelioration of general condition upon the administration of this kind of nourishment. The effects of alcohol in the same direction are even more remarkable,* but they are not constant; some mysterious law determines differences which are at present ultimate facts, incapable of solution. When alcohol acts without narcotising it reduces morbid temperature; but whether it will narcotise or not, and if so in what dose, are points as to which we can never be certain without experimental trials; although a certain speed and a certain form of pulse-wave, together with the presence of delirium, will frequently direct us rightly. Much yet remains quite unknown as to the profounder relations of alcohol to the fevered organism and the causes which allow it to be tranquilly oxidised in large quantities by one fever patient, while much smaller doses will disorder the system of another. But the fact remains that for pyrexial patients, presenting a certain group of phenomena which are now fairly well known, alcohol produces the truest and the most direct reduction of temperature—with the one exception of that caused by the cold bath—of which we have any example in the whole round of known remedies.

We have thus dwelt on the susceptibility of alcohol to oxidation, because that phase of its action assimilates it to common food. Our readers are well aware, however, that this is not the only probable source of the heat-lowering power of alcohol. The supposed action upon small cellular bodies which Binz, more especially, has assigned to it, is one extremely probable source of this cooling power. In this respect we may apply to alcohol all the remarks which we formerly made respecting quinine;† but upon this part of the subject we must await for the present the issue of fresh experiments and fresh controversies, which are even now in progress.

* Dr. Ringer probably underrates the amount of the reduction that can be thus effected, at any rate in the most appropriate cases.

† Vide LANCET, May 4, p. 629.

DR. RICORD ON SYPHILIS.

(Meeting of the British Medical Association at Birmingham, August, 1872.)

WE are enabled to-day to continue the French Professor's observations on Syphilis. The manuscript, after being corrected by M. Ricord himself, was lost while in the care of the post-office, and we have only just recovered it.

Dr. GROSS asked whether the soft chancre was capable of contaminating the constitution.

Dr. RICORD said his opinion was that a soft chancre, when accurately diagnosed, never gave rise to constitutional disease. This was a law as absolute as possible. But they must be careful, or errors of diagnosis might be made. It was not always easy to establish the difference between soft and hard chancre, but when the diagnosis was certain, they might be sure they would not have any constitutional disease after the soft chancre. On the contrary, even as long as six months after hard chancre secondary symptoms would appear. This was one of the most clearly established facts in practice. But the hardness of the chancre was not always well marked (*bien formulée*); it might be very superficial in those varieties that were attended with excoriation. When there was a something like parchment at the base, a chancre was very easily taken to be soft, but was not so; and he had had cases sent to him as instances of soft chancre which had been followed by secondary symptoms, but which were well characterised by the parchment-like base. However, there was a symptom of more value than the parchment base, a symptom that was one of the most important witnesses to constitutional affection, and that was the non-inflammation of the glands—they were cold and dull. In general several of them became enlarged; it was very seldom that only one was found to swell after hardened chancre; and not only were the glands swollen but the enlargement frequently occurred on both sides, in both groins. The enlargement of the glands was of much value as a characteristic of hardened chancre. The enlarged glands appeared very early, even during the first fortnight of the existence of the sore. With the soft chancre the glands did not always swell; in a great many cases there was no swelling. They would never find a real hard chancre without swelling of the glands; and they would also find many cases of soft chancre with swelling, these cases depending upon surgeons confounding the hard chancre with thickening dependent upon inflammatory infiltration of the tissue immediately around the sore. But if the glands should swell after soft chancre, it was probable that suppuration would come on. With hard chancre there was no inflammation and no suppuration. The older writers directed their efforts to cause an indurated sore to suppurate, in the belief arising from the practical observation that when a bubo suppurated there was no constitutional disease, and therefore they were under the belief that the poison was thrown out of the body. In their quaint way of putting the fact, "they did not like to shut up the wolf within the fold." But they could not bring on specific suppuration in the case of indurated glands; it was impossible. He had tried all means of doing it, and could not succeed in the cases of specific suppuration. In the instance of soft chancre what had they to do—await the occurrence of suppuration, which might either be attended by simply inflammatory or specific bubo? With the soft chancre the inflammatory bubo appeared sometimes two, three, or four weeks after the occurrence of the chancre, and it had the characteristic pus of the soft chancre. There was such a difference between hard and soft chancre that it was difficult to make a mistake. When a patient consulted him (M. Ricord) suffering from soft chancre he said to him, "Be quiet; you may have a bubo; that will suppurate, but your constitution will be unaffected; you will not be liable to secondary symptoms." With a hard chancre he could predict indurated glands, attended by constitutional symptoms, within six months, provided proper treatment were not followed. He would add, that when it was decided that the case was one of hard chancre or soft chancre, the treatment was very simple. When there was a doubt as to the nature of the chancre, he waited till some characteristic symptom arose. But there were cases in which the existence of a soft chancre did not prevent a patient from contracting a hard chancre. The patient might have the two species at the same time, contracted from different sources. The two species, hard and soft chancres, do not depend upon the difference in the ground, but on a difference in the seed (*contagium*). So that the new comer who had relations with a woman suffering from the two species could take his choice. If the patient had a true indurated chancre and well diagnosed secondary symptoms, he might catch the soft chancre as often as he pleased, and it would be unattended with specific constitutional disturbance.*

Mr. LORD (London) asked Dr. Ricord what was his experience of municipal interference in respect to contagious diseases in Paris, and what was his opinion as to the effect of such interference in promoting immorality and degrading the character.

Dr. RICORD said it was surely a very good thing to have the women examined. It made the disease less frequent—no doubt of it. From what had already been done in France he saw that the same practice would be beneficial here. It was already a great thing that English sailors no longer brought the disease into France; the French would take care it did not return back into England, and that was a free exchange.

The Chairman announced that the Council had resolved to make Dr. Ricord, Dr. Demarquay, and Professor Gross honorary members of the Association.

* Dr. Ricord has established a law on which he sets great value, and for the verification of which he thinks the present and future generations will owe him a debt of gratitude. It is that of having discovered and described the UNICITY of the syphilitic diathesis—in fact, subjecting syphilis to the LAW which is common to small-pox, cow-pox, measles, &c.—ED. L.

MOSQUITOS have appeared on some parts of the Kentish coast, and have caused considerable annoyance to agricultural labourers. The insects have been traced to a ship lying off Woolwich.

Foreign Gleanings.

ASPIRATION OF MORBID FLUIDS AS A MEANS OF DIAGNOSIS AND TREATMENT.

In a note communicated to the Academy of Sciences by Claude Bernard, Dr. Dieulafoy, of Paris, has summed up the results of the various interesting experiments which he has been conducting for two years with his capillary aspirator, an instrument which is now being extensively used in Paris with the very best results. M. Dieulafoy strongly insists on the use of the aspirator as a means of diagnosis and treatment. It serves, in the first place, to show with certainty the presence, seat, and character of various pathological fluids, and also to dry up the source of such fluids. Dr. Dieulafoy, emboldened by the results obtained, does not hesitate in asserting that it is always possible to reach with certainty, and with no kind of danger, any collection of liquid, whatever may be its situation and its nature; that the aspirations may be frequently repeated in the same position without any inconvenience, and almost always with the effect of drying up the source of the fluid. He lays down the following law as the result of his experience:—When a fluid, whatever may be its nature, gathers in a serous cavity, or in any organ, and when that cavity or that organ is accessible without danger to the patient, our first care should be to withdraw that liquid; if it again forms it must be again withdrawn, repeating the operation frequently, if necessary, until the serous membrane is exhausted by a purely mechanical and quite inoffensive means, and without attempting to modify the secretion by irritating and sometimes dangerous agents.

The following is a list, divided into three groups, of the various diseases to which M. Dieulafoy's aspirating method has been applied:—1. Fluids accumulating in a serous cavity: hydrocephalus, hydrorachis, pleurisy, pericarditis, hydrarthrosis, synovial cysts. 2. Fluids formed in the deep parts of organs: abscesses or hydatid tumour of lungs, abscess or hydatid of liver, liquid tumours of the spleen and of omentum, ovarian cysts, retention of urine, strangulated hernia of the intestine. 3. Liquids formed within the cellular tissue of various regions: congestive abscess, bubo, perinephritic phlegmon, iliac phlegmon, peri-uterine phlegmon.

TWO CASES OF VEGETATING ENDOCARDITIS.

At a recent sitting of the Paris Academy of Medicine, Dr. Oulmont presented the morbid specimens of two cases of vegetating endocarditis. Both hearts showed a considerable quantity of long, loose, floating pediculated vegetations attached to the endocardium. These vegetations, the origin and cause of which it was not possible to make out, did not seem to produce in themselves any serious inconvenience, but through their fragmentation they gave rise to the migration of numerous embolisms, which obstructed the capillaries and bloodvessels of smaller size, and produced bloody suffusions, softening, &c., thus causing death in both cases. M. Oulmont compared this variety of vegetating endocarditis with ulcerating endocarditis, which it resembles in its embolic formations, but from which it differs by the course of the disease and the general typhoid and pyæmic symptoms, which had not been observed.

THE NATURE OF MELANOTIC TUMOURS.

In a paper published in *La Gazette Médicale de Paris*, Dr. Nepven, summing up the results of his investigation of melanotic tumours, concludes that the melanic matter is immediately derived from the blood. This is proved by the fact of the existence of colouration varying from yellow and brownish-red to black in melanotic tumours; the presence of yellow matter and blackish granulations in the cells of the tumour (plasmatic cells), and even in the capillaries, the glands and cutaneous epithelia being perfectly healthy. The alteration of the blood takes place locally in the tumour itself. Diffusion and hæmorrhage are the two causes of the colouring matter from the bloodvessels. It is probable that the elaboration of the cells themselves accounts in some degree for the intensity of colouration, and the rapid metamorphosis of colouring matter. Melanosis is, therefore, merely an accident in certain tumours, and this would explain how some of these tumours are only partially melanotic. Part of the melanotic substance may be found in the blood, urine, and principal viscera in the form of colouring matter or a finely granulated substance. Several experiments of inoculation failed to reproduce melanosis.

FIVE CASES OF HEMIANÆSTHESIA.

At a recent sitting of the Biological Society of Paris, Dr. Charcot, of La Salpêtrière, gave the details of five cases of hemianæsthesia with unilateral trembling which he had observed. The patients had been all of advanced age, and had had a more or less sudden attack of apoplexy, after which hemiplegia, hemianæsthesia, and hemichorea had supervened. In three cases a post-mortem had been made, and Dr. Charcot had stated the existence of a sclerous or hæmorrhagic lesion of the optic layer, radiating more or less towards the cerebral pedunclesand the corpora striata. Dr. Charcot said he did not pretend to furnish the definitive explanation of hemianæsthetic phenomena, but thought he might rationally conclude, from his cases, that there existed in the nervous centres a special situation, the lesions of which produced hemianæsthesia of general sensibility.

CHARACTER OF SCURVY.

During the siege of Paris the medical men of that city had numerous opportunities for the investigation of scurvy. Dr. Leven has just laid before the *Académie des Sciences* the notes of his experience of an epidemic of scurvy which he observed at the Hôpital Militaire of Ivry. The disease, he says, is not due to the absence of vegetables, since cure could be effected by the use of raw meat, but it was the result of insufficient food and of bad hygienic conditions. In scurvy the fatty tissues do not disappear, but the muscular tissue becomes fatty, the muscular stripe disappears, and is replaced by fatty granulations; fatty degeneration affects the muscles according to their degree of activity; the heart first becomes fatty, then the muscles of the back, the thighs, the arms, &c. In respect to the blood, the quantity of fibrin increases, whilst the number of the globules diminishes by half.

SUBPERIOSTEAL RESECTION OF THE ELBOW.

M. OLLIER, of Lyons, has just made known the results of subperiosteal resection of the elbow in forty-eight cases, twelve of which were traumatic, and the others caused by chronic arthritis. M. Ollier states that, with proper care and skilfulness in dissecting the entire periosteal sheath, the bones are not only reproduced in their continuity, but with their heads and articular tuberosities, so as to permit the play of the joint in all its movements. It is necessary to employ minute precautions in the after-treatment for obtaining the above results. Slight movements must be made at an early time with the joints. Anchylosis is not to be dreaded, but rather too great mobility of the joint, especially in individuals of from forty to fifty years of age. In these cases the bones must be cut to a certain length, so as to avoid such mobile articulations.

ASPIRATING PUNCTURE OF THE BLADDER IN CASES OF IRREDUCIBLE HERNIA.

Aspirating puncture of the bladder in cases of irreducible hernia is one of the important medical novelties now being investigated in France. Several strikingly successful cases have already been published, and THE LANCET in one of its late numbers contained the original relation of a case operated on by Dr. Léon Labbé, of Paris. Dr. Demarquay has just presented a paper on the subject to the Academy of Medicine, wherein he states his intention to carry out the application of the proceeding to the following cases:—(1) To all congenital herniæ, and to recent herniæ which become strangulated at the time of their formation; (2) to old cases of hernia perfectly reducible a few days before the strangulation, and in umbilical herniæ recently strangulated. Dr Demarquay adds that this aspiration of liquids and gas, with the object of rendering taxis more easy, must be practised at an early time, when we are almost certain to put back into the abdominal cavity an intestinal fold which is not yet altered and is still capable of resuming its functions.

THE LANCET.

LONDON: SATURDAY, AUGUST 24, 1872.

DR. CARPENTER is not without considerable qualifications for the rather ambitious task he set himself at Brighton. To a knowledge of inductive science almost encyclopædic in its comprehensiveness he unites an intelligent interest in the problems of the theologian and the metaphysician. In his more special department of physiology he has never lost sight of its psychological aspects; while, by an ingenious extension of the reflex theory from vital to mental processes, he has established (though Professor LAYCOCK of Edinburgh is a fellow-claimant to the conception) the correlations of consciousness on a basis most welcome to the alienist. Certain influences, moreover, in his student-life, have always kept him devout and reverential in his attitude to religion; and while he will accompany DARWIN and HUXLEY and SPENCER to the furthest verge of inductive inquiry, he refuses to shut his eyes, as they do, to the mysterious world beyond—a world into which the metaphysician peers wistfully, and which the theologian claims to penetrate by the chart of revelation.

Between the opposing camps of science and theology Dr. CARPENTER comes as a mediator. In the language of diplomacy, he seeks, after rectifying their respective frontiers, to effect a compromise between them on the basis of *uti possidetis*, so that henceforth they may addict themselves to the arts of peace. We doubt if his intercession, well meant and adroit as it is, will pacify the belligerents. Nothing will content the theologian but a return to the *status quo ante bellum*—an abandonment on the physicist's part of his preference for the uniformity of nature over the authoritative plea of miracle and revelation. This demand the physicist will not listen to, but advances with increased pertinacity the claims of ascertained law—of the doctrine of evolution, traced as it is along a chain in which link follows link with adamantine necessity. It is at this point that Dr. CARPENTER's interposition becomes most earnest and painstaking. On what (he asks the physicist) is the "uniformity of nature" founded? What evidence can science produce that its "laws" are not liable to perennial revision, modification, or reversal? Take, for instance, the central law of astronomy—the exactest of the inductive sciences—the law that one body attracts another directly as the mass and inversely as the square of the distance. Is it not possible that this may be merely a provisional law, susceptible of being modified by a wider and more penetrating scrutiny into the relations of the stellar universe? And, if such be so, what becomes of the "uniformity of nature"—of the fixed laws of evolution, with which (according to some physicists) not even the Almighty dare tamper?

To this the physicist answers that the hypothesis implied in Dr. CARPENTER's question is unreasonable; that he is not called upon to "admit a reserve of the possibility of something different—a reserve which we may well believe that NEWTON himself entertained." The law of gravitation is one which it has taken centuries to evolve—a law which ARCHIMEDES, GALILEO, and KEPLER preluded and NEWTON formulated—a law which receives fresh confirmation with every addition to our knowledge of matter and motion. The principle of "sufficient reason" established by LEIBNITZ more than suffices for the law of gravitation, and indeed for the majority of those on which natural philosophy in its entire *ensemble* is based. Unless, indeed, the uniformity of nature is admitted and practically assumed, not only in science, but in every-day life, the theologian's position becomes as uncertain as the physicist's. We say nothing of the teleological argument and the all-pervading adaptation of means to end. Such bulwarks of religion as the "Analogy" of BUTLER would be sapped in their foundation if the laws of nature ceased to be regular or uniform. Dr. CARPENTER himself had but the other day to criticise the pretensions of the so-called Spiritualists; and this he proceeded to do on the assumption that nature's laws were fixed, and that such infractions of them as Spiritualists pretend to witness were, as violating her uniformity, inadmissible and absurd. Nothing, in fact, is to be gained by disputing the thesis of science that nature's processes are certain, regular, and uniform. Theology will not thank the auxiliary who volunteers such arguments in her defence.

Dr. CARPENTER occupied much stronger ground when he denied the coercive action of "law" when simply a generalisation of phenomena, but insisted on assigning that value to it when expressing the universal conditions of the action of a force the existence of which we learn from the testimony of our own consciousness. "Thus we are led," says he, "to the culminating point of man's intellectual interpretation of nature: his recognition of the unity of the power of which her phenomena are the diversified representations." Call this power what we please, it must be recognised as antecedent to the "laws" which the physicist personifies and worships. Familiarity with the ontologists of Germany would have enabled Dr. CARPENTER to follow up his advantage with more success than he has attained—would have placed him, in fact, on the same higher ground from which the author of the "Secret of Hegel" assails the physicist camp with such fatal effect. As it is, he would leave it in doubt whether his thesis were that of the old Greek πνεῦμα inspiring all creation—pantheism, in short,—did we not know from collateral sources that his view is that of BACON and BUTLER; the former of whom has said, "I would rather believe all the fables of the Talmud than that this mighty frame was without a mind."

WE fear it is still true, as Dr. WILKS suggested at Birmingham, that the mass of the public is in accord with the least scientific members of our profession, with that "least educated" portion of it, gradually getting smaller and smaller, which has its remedies for special symptoms "medicines for the spasms or a pill for the liver complaint." Dr. WILKS says the public compel medical men to attend, not to particular complaints, but to particular organs. They have their liver doctor, and their lung doctor, and their kidney doctor, according as they think the one or the other of these organs is at fault; and if by

any chance they get to the lung doctor, and someone afterwards declares their liver at fault, they never cease to regret their mistake, and to blame it for the phthisis that all began "with the liver." By the way, we may say for the benefit of "the least educated" members of the profession who may be intending to gratify this demand of the public for special "organ" doctors, that we believe that still—notwithstanding the great extension of knowledge and intelligence among the public—nothing is so popular or so profitable as what Dr. WILKS calls a "liver doctor"; which generally means a doctor untroubled with any recent knowledge as to the functions of the liver, or as to those medicines which most certainly and innocuously affect its action, and whose short creed goes into this shape—that nearly all diseases depend more or less remotely on "the liver not acting," and that the way to make the lazy organ do its work is to stir it up with a good brisk purgative, and especially with some form of mercury or with podophyllin. This creed is short and practical, and involves little trouble of minute inquiry into the patient's habits or health. And it has the further merit of being popular; for, whatever the reason, ignorant people derive a strange satisfaction from being told that their liver is not acting, and will submit to the most disturbing and injurious medicines that any quack or uneducated person may recommend.

Dr. WILKS did good service in pointing out the absurdity of specialism in the light of these notions of the public about liver doctors, paralysis doctors, &c. It is easy to see the want of intelligence implied in thinking that doctors can so isolate the diseases of internal organs, or that a medical man who set up for being doctor for one particular organ could be trusted as a physician. It is a very common thing for patients with slight tubercular disease to think themselves merely bilious. But it would be very serious for a medical man to give sanction to the notion. Moreover, physicians know now—thanks very much to pathologists like Dr. WILKS—that disease is not located in organs so much as in tissues, and that it is not limited to one organ, but generally affects distant parts, with functions perhaps altogether different from that of the organ primarily, and perhaps apparently alone, affected. Yet more, it is well ascertained that there is in most cases of chronic disease an original diathesis which has largely determined the nature of the health and of the diseases of the patient. A diagnosis founded upon the notion that disease is a mere fault of one organ is almost sure to be wrong, and any treatment founded on it to be correspondingly injurious, or at least inadequate. Clearly, then, Dr. WILKS was justified, as far as internal disease was concerned, in denouncing that tendency of the public to "ticket" doctors as knowing specially only one thing—as being, not physicians in the large and true sense of the word, but kidney doctors, heart doctors, or liver doctors. There may be something to be said in favour of one or two specialties, the operations of which are of immense importance, and require much nicety of manipulation; but for ninety-nine cases out of a hundred, as Dr. WILKS says, the best advisers are the general practitioners. And even in regard to that most brilliantly justified specialty, the ophthalmic, there is this to be said, that it cannot be practised well without a general knowledge of pathology and medicine; and that those institutions which divert ophthalmic cases from the general hospitals are antagonistic to the completeness of these hospitals as medical schools.

It is gratifying to be told by Dr. WILKS that the fondness for specialties has been waning, and that a larger view of the practice of medicine, founded on a more scientific basis, is taking its place. There are two ways of limiting the growth of specialism and special practitioners. One is, by the extension of education among the people enabling them to perceive that the body must be regarded as a whole, and not as made up of unrelated and independent bits or organs. The other, and we confess to thinking the chief, way in which specialism is to be destroyed is by promoting the more perfect education of the general practitioner. Scarcely anyone goes to consult a special practitioner at once. He only does so after an unsuccessful appeal to his ordinary adviser. It follows from this that the more the general practitioner knows of his profession, and the more he can do, the less frequently will his patients be tempted to consult the special practitioner. The provinces have been rich in men who could do almost anything in medicine or surgery; and it is only, or chiefly, by the multiplication of such practitioners that the growth of specialism is to be checked. It is vain to think that ailing wealthy human nature will consider anything but how it can be most quickly relieved. It will always send first for its ordinary adviser. If he is a man of many aptitudes, to whom nothing in medicine or surgery comes amiss, then specialism will die a natural death.

A general hospital is, or ought to be, a school in which the student is taught to do everything which, as a medical man, he may be called upon to perform. In it a patient's whole case is considered. For the sake both of the poor and of the promotion of medical education, in which all classes are so deeply interested, those who have money to give should give it to general hospitals. Dr. WILKS's advocacy of these is disinterested and weighty. He is connected with such a hospital, of ample wealth and perfect independence; and he declares it a standing disgrace that in England, and especially in London, so little is contributed to their maintenance, while the wealthy give their thousands to institutions which excite their sentiment or please their fancy. This blame is not unjustified. We urge on all who are interested in general hospitals to make them perfect, so that patients and students may find in them all that they need. Their claim will then be irresistible, and special institutions will disappear.

DR. SANDERSON, in the course of his able address at the late meeting of the British Association, gave good ground for hope that in a few years' time this country will again occupy the leading position in the domain of physiology which she once and again held when HARVEY and HUNTER were her pioneers, and which she has so lamentably lost since she allowed the mantle of these great men to be wafted across the Channel, and worn by the LUDWIGS and BERNARDS of the Continent. Yet it is with something like humiliation and shame that we find that the most promising

feature in the scientific history of the country in this department of knowledge during the past year that an accomplished physiologist can chronicle is, not that anything has really been effected, any new line of inquiry opened up, any special research completed, but that the inactivity too painfully evident in our biological workers is not destined to continue, since there has been a sudden and considerable increase in the opportunities that are now afforded to the student for the acquirement of physiological knowledge. The praise of taking the initiative in this movement undoubtedly belongs to Trinity College, Cambridge, from which, under the guidance of Dr. FOSTER, three valuable researches have already sprung. Similar opportunities exist in the Brown Institute in connexion with the University of London, at which Dr. SANDERSON has himself, and in conjunction with Dr. KLEIN, done so much good work; whilst the great schools of London, and a few in the provinces, have made great efforts to provide adequate buildings and apparatus for original research.

Dr. SANDERSON made some sensible observations in regard to the introduction of natural science teaching into our schools. This he considers would be useful if thorough and genuine, however elementary in character it might be; but it should be clearly understood that, if it is to be made a part of our educational system, it must be introduced, not as a mere ornamental addition or accomplishment, but as part of the groundwork. Physiology, he rightly thinks, is not so suitable as physics and chemistry, for a knowledge of both of these is almost indispensable for the acquirement of the other allied sciences; they can be taught and understood independently, the appliances required for teaching them may be easily obtained, and, what is still more important, they can be taught practically with comparative facility. Lastly, their study is fitted in a remarkable degree to serve as a mental discipline, and as a means of developing at an early period of life that certainty, that conviction of mind, that clear realisation of facts seen, not by the bodily, but by the intellectual eye which constitutes the scientific spirit. There can be little doubt, however, that rudimentary instruction in physiology might be given with great advantage to the higher classes of schools; for not only does this science deal with many subjects of general interest, "but it enables each one to take better care of himself, and to understand how to preserve himself by reasonable precautions against some of the well-recognised causes of disease."

We trust that the physiologist to whose lot it falls to deliver the address to this section at the British Association meeting next year will have a better account to give of the progress of science, and to say a few words of congratulation for work done as well as of encouragement for work to come.

THE question of the expediency, with the view to the extinction of leprosy in India, of providing special leper asylums throughout the country for the reception and treatment of the leprous, is one which, in fulfilment of a promise, we now proceed to notice. The question is an imperial one, and requires grave consideration. Leprosy, as far as our present information goes, is showing no tendency to subside in India, and yet this is anxiously looked for at home. The leprous community is at the same time a large one; and the mode in which it should be treated cannot be a matter of indifference to the Government. The Leprosy Report of the College of Physicians in unmistakable terms affirms the undesirableness of the compulsory segregation of lepers as a means of repressing leprosy. It may be fairly said that this conclusion was arrived at mainly on the ground that leprosy had disappeared from Europe and other countries, apparently as the result of an improvement in hygiene and the diet of the peoples among which it occurred; and that it is hoped that leprosy will disappear from India as civilisation advances by similar causes. We have on former occasions taken exception to this view, and have asserted that leprosy was in great measure got rid of as the result of the intensely severe and rigorous laws and plans put in force to isolate the leprous from the healthy; the Pope, with his bulls and interdicts, lending powerful and effective aid in this respect. Dr. VANDYKE CARTER, in his Report on Leprosy in the Bombay Presidency in 1872, again directs attention to this point; and whilst admitting the beneficial operation of good food and hygiene upon the leper, argues in favour of attempting the extinction of leprosy in India by similar measures, but enforced in connexion with that more humane general treatment of lepers which the enlightenment of the age is securing for them. We quite agree with Dr. CARTER that in India, as long as diseased people are allowed to freely intermix with others, leprosy will be propagated by marriage and by intermarriage of the affected; the influence of caste rules, to which we have before referred, effectually securing the union of members of families in whose history leprosy is a prominent item. Something more than a policy of expectancy is needed where lepers abound to the extent of one in every thousand persons. There is no machinery in the East for securing the stamping out of leprosy, similar to that which existed in Europe, but only such as is invented by popular prejudice and superstition, and which makes the leper an outcast, dependent upon the capricious mercy of those about him, and so consigns him to a life of wretchedness and misery. Better were it to institute a humane system of segregation than to permit the continuance of the present system, by which the leper becomes the hideous mendicant, and dies to the relief of all who have to do with him. The magistrates representing the districts in which leprosy most abounds in Bombay—for example, Rutnagherry, Poona, Sattara, Nuggar, and Durwur—have expressed themselves in favour of the plan of providing lazar houses, or leper villages, where the leprous may be properly treated and cared for. Dr. CARTER believes that every district would itself bear the expense of these institutions, and that the project would be hailed with satisfaction throughout India if it were seen to be based upon humane and enlightened principles; nor would any additional agency be required beyond the present police and subordinate departments to carry such a scheme into execution.

Dr. CARTER is to be commended for the clear and emphatic manner in which he has put forth his views in the matter. He is clearly actuated by philanthropic motives;

and the time will come when the policy of adopting some such measures as he now advocates will be recognised as both wise to the community and, as we believe, altogether kind to the leper. That there is a disposition on the part of the Government at home to alleviate the miserable lot of the leper is abundantly evident from the measures that are being taken at the instigation of the Colonial Office to have them better fed and medically cared for in our colonies, and from the institution of leper villages and special hospitals; but, after all, it is to the great question of the extinction of leprosy, and not merely to the alleviation of the sufferings of the actually leprous, that the mind of the philanthropist and the legislator should be finally directed.

THE vestrymen of St. George's, Hanover-square, alarmed at the increase of pauper lunatics in the parish, have moved that the Commissioners should investigate the phenomenon. They might have saved themselves the trouble. In the last report of the Scottish Commissioners the increase of pauper lunatics is shown to be universal, and is relegated to its causes in the thousand and one disadvantages—physical, moral, and social—under which the poor live and die. Practical remedies are also suggested in the report—remedies which the St George's vestrymen would do well to consider. Meanwhile, the action taken by that body has furnished the lay press with a topic, not unwelcome in the recess, from which to weave sensation articles. The causes of lunacy, manifold as they are, receive some accessions from these journalists. Medical men, it appears, when appealed to by the magistrate as to a pauper's state of mind, are paid a fee only when they certify "mad"; therefore they have a direct interest (which they seldom fail to satisfy) in so certifying. Again, the profession abounds with "black sheep," or rather with sheep in wolves' clothing, who prostitute for the purposes of designing relatives their power of certifying the insanity and annulling the freedom of victims to family cupidity. The number of these cases, we are assured, is estimated at "tens and scores" (your sensation journalist is never definite); and even though sane on their admission into the asylum, they seldom remain so after a few days' experience of its horrors. Furthermore, the profession is pronounced to be (as a rule) quite incompetent to distinguish the insane from the sound; and, consequently, its numerous though unwitting mistakes (always on the side of diagnosing insanity where it does not exist) are another fertile source of the increase of lunatics.

We shall neither stop nor stoop to notice these allegations. The medical man's inducements to perjure himself are as few as in any profession. Mistakes in diagnosis made wilfully or through incompetence render him liable to penalties of the most deterrent kind; and the instances in which such have been detected are rare indeed. But while asserting all this, it may be admitted that medical men, from their want of special training in medico-psychology, theoretical and clinical, are sometimes put in positions unusually delicate and difficult. Called upon to pronounce a man sane or insane, they lack the power of diagnosis; they are either too subtle or too lax in their estimate of symptoms; and conflict of opinion occurs among them, to the amusement of counsel, the embarrassment of the jury, and the impatience of the judge. For this undeniable state of things there is but one remedy. Let every candidate for medical diploma or licence be expected to come prepared, by clinical study, for examination in lunacy. Let questions on that subject form part of the pass-paper. Let, in short, the physician's or even the surgeon's diploma imply proficiency in medico-psychology, as well as in pathology and therapeutics; and then the public will be satisfied that in certifying insanity the practitioner is professionally competent to do so. Before, however, this qualification be attainable, the student must have opportunities for studying lunacy. A special course of lectures on the subject should form part of the curriculum of every school. Clinical instruction, supplementary to such a course, should also be provided. As it is, there are very few schools indeed where lunacy can be studied. It is only of late years that the metropolitan universities have awoke to the necessity of including medico-psychology in their programme—even Edinburgh, famous for her devotion to metaphysics, ignoring the pathology of mind till within the last decade. With the provincial schools it has of course been still worse. The public will not be satisfied, nor the dignity of the profession adequately sustained, till medico-psychology assumes its rightful place in the practitioner's qualifications.

THERE is, happily, little to be said about cholera prospects this week. The epidemic appears to be steadily declining in St. Petersburg and the districts of Southern Russia; although, as we go to press, a telegram reaches us that it has broken out with great violence in the province of Minsk, about eighty miles from the western frontier, and that fresh cases are still occurring at Narva, in the Gulf of Finland. The disease also exists in an epidemic form at Helsingfors, Warsaw, and Taganrog. Under the circumstances detailed above, and having regard to the fact that it has not during the past fortnight really advanced at all in a westerly direction, we are justified in reporting hopefully, if not confidently. Until September is over, we cannot, looking at past experiences, consider ourselves free from danger. Coming events are said to cast their shadows before. In this case we have seen the shadow, and can do without the substance.

Medical Annotations.

"Ne quid nimis."

UNSKILLED MIDWIFERY.

MR. GAY's letter on this subject in last week's LANCET points out an evil which it is more easy to expose than to name a remedy for—the practice of midwifery by uneducated and unqualified persons, such as midwives, druggists, &c. Mr. Gay is not likely to speak without data, and he says he has reason to know that the habit of attending women in parturition is becoming, especially in rural districts, a trade carried on by druggists and others. Mr. Gay urges that those who practise obstetricy should be required to possess a legal qualification, just as those who practise any other branch of medicine or surgery. A druggist, we apprehend, is placed in regard to obstetricy

just as in regard to other branches of medicine or surgery. He could not claim for any such service. There is no legality in his practice further than that it is not forbidden. Anybody that pleases, or whom the lying-in woman chooses to have, may attend her in her confinement. There can be no doubt that this is a most dangerous state of matters for lying-in women. The difficulty is, as we have said, to know how to remedy it. Midwifery practice requires a medical education. But educated medical men will not attend midwifery for such sums as the services of midwives or druggists can be obtained for. And the law is as little likely to compel poor lying-in women to pay half-a-guinea or a guinea to a qualified medical man, as it is to compel the educated doctor to attend for less, or to prohibit the midwife or the druggist from doing this duty. One remedy would be for the licensing bodies to give certificates of competency in midwifery to midwives. And, despite all the objections to it, this ought, in our opinion, to be done. The great objection is that it would give a legal sanction to practise midwifery to a class of persons unfit to practise any other department of medicine, though midwifery requires no less knowledge of medicine and even surgery than other parts of the medical art. But we must recognise facts. Large numbers of women will be attended by midwives, and the question is, whether it is better that they should be attended by any woman that likes, or only by such women as by some special study have enabled themselves to pass an examination in midwifery. The examination would need to be limited, but it should be sound and strict as far as it goes. As to druggists practising midwifery, all we can say is that it is a very dangerous practice for druggists to indulge in. They had better restrict themselves to their own calling.

A SUCCESSFULLY DEFENDED ACTION.

THE Assize season has brought with it, unfortunately, more than one action against medical men for alleged malpractice; but we are glad to notice that in one of the most recent the plaintiff failed altogether to establish her allegation. The case was tried at Bristol. A cook named Watkins sued Dr. Meeres, of Melksham, for having treated a fractured leg so that she was permanently disabled. The accident occurred in November, 1870, when the plaintiff fell and broke both bones of the leg above the ankle. Dr. Meeres saw her the next morning, reduced the displacement, and placed the limb on a MacIntyre splint, which was slung in a Salter's cradle. The splint required readjustment after a day or two, owing to the bones becoming displaced by muscular action, and it was then kept on the usual time, after which a starch bandage was applied. In February the plaintiff was allowed to go into the kitchen, but was expressly warned *not* to bear any weight on the foot, which was slung from the neck in the ordinary way. This caution was denied, and at all events disregarded, by the patient; and eventually, owing to her over-exertion, the union appears to have yielded, and the foot became permanently deformed. Dr. Meeres produced abundant evidence to show that his treatment had been correct, and that the plaintiff had disregarded his directions; and the jury promptly found a verdict for him, the judge, Mr. Justice Lush, laying down the law very clearly that, in order to find a verdict against a medical man, it must be shown that he had exhibited either culpable ignorance of his profession, or culpable want of care in his treatment.

The only part of the case we need remark upon was the medical evidence for the plaintiff. We are at a loss to understand how Mr. Gore, the senior surgeon of the Bath United Hospital, can have taken upon himself to say that the case was one of "Pott's fracture," and to express his opinion that Dr. Meeres's treatment was "quite wrong." However much a case of "Pott's fracture" may be mismanaged, it is impossible that the limb can be shortened and the tibia deformed as it was in this case, where there was clearly a fracture of both bones near the ankle-joint, involving the whole width of the tibia, and not merely the internal malleolus. It is very much to be regretted when an old and well-known practitioner finds it necessary to take a line opposed to the interests of a younger medical man from his own neighbourhood.

SEASON TRADES.

AT the close of what is termed "the season" we receive the reports of the Home Office Inspectors of Factories and Workshops, and, with the recollection of the late Dr. Aldis's continuous exertions fresh in our minds, naturally turn for information as to the present condition of the milinery and dressmaking community, now included in the supervision induced by the operation of the Workshops Act of 1871. Mr. Redgrave, in recording that these branches of business are included in the list of permits for extra time-work, says: "Among dressmakers and milliners, a class which has long borne the character of indulging in long hours, especially in the metropolis, I certainly have failed to find any disposition to work continuously in this manner." Again: "As a rule, the first hands—i.e., the managers or forewomen—are opposed to overwork;"—and, "as the young persons are aware that permission may be obtained to work overtime when a little pressure arises, they have worked the more diligently within the ordinary hours, and have thus rendered any increase of hours unnecessary." We have culled the salient points of the report because they appear to indicate a better state of things. Nothing, however, so far as we can discover, is said as to the general sanitary arrangements of the rooms in which these women work. The late health officer for St. George's laid great stress on this point, and indicated in his own reports, over and over again, that the kind of hardships to which these people were subjected arose more from foul air than from long hours. We are quite prepared to concede the necessity that may sometimes exist for working overtime in certain seasons and trades for short periods; but under such circumstances it should be a *sine qua non* that the workers are not overcrowded, that the workrooms are well ventilated, and that the air breathed is as pure as can be procured in the middle of this great metropolis. The Legislature does not, according to our own knowledge and belief, lay sufficient stress upon these latter principles. It is almost impossible to prevent by any legislative means the earning of money by overtime work, and, indeed, we know that the practice obtains (though to a comparatively mild extent) in some of our Government offices. But we shall best help health in this as in other branches of the working community, by bringing sanitary science to bear more upon their surroundings than upon their hours of labour.

A VISIT TO THE "PLYMOUTH."

THE wise and understanding people on the other side of the Atlantic have been airing some of their ships of war off our coasts, and have exchanged hospitalities at various ports of call. Three of their vessels have been at mooring off Gravesend during the past week, and we took the opportunity of paying them a visit, willing to take any leaves out of their book with respect to sanitation afloat. The *Plymouth* is a very trim ship of the old frigate class, and her complement consists of from three to four hundred men of all ranks. There are no cabins or crews' quarters below the water-line, the ward-room is on the main-deck

aft, and there is a very comfortable sick-bay in the bows, which latter is fairly ventilated. There is a special apparatus for lowering down the wounded, and some minor contrivances in connexion with the dispensing arrangements well worthy of attention, and showing the proverbial handiness of the Americans. A Book of Instructions on hygiene and general professional matters is furnished to each ship, a review of which will be found in another column. Windsails of the old fashion are used, and we agree with the opinion that under ordinary circumstances they act fairly well. The scale of rations, which appears to have been revised during the present year, does not excel specially either in quantity or quality, as compared with that in common use in the American mercantile marine, in which for the most part an *ad libitum* arrangement is adopted. This latter plan is, however, by no means necessary in the navy, as the men are particularly well cared for as regards quality of food, clothing, and general accommodation, and, we believe, by no means excessively worked.

Although nothing specially new was seen to claim attention, inasmuch as the hygienic arrangements are almost precisely the same as those that obtain on the ships of our own navy, the visit was replete with enjoyable circumstances, and the courtesy and hospitality received on board from Dr. Bright, the surgeon, as well as from the commanding officer, will associate our visit to the *Plymouth* with many pleasant memories.

CONSULTATION FEES.

AT the Wells Assizes, a difference between two practitioners, formerly in partnership at Wellington, Somersetshire, turned upon the question of what constitutes a consultation fee. We refer to the case of Pearse *v.* Bridge. The defendant had retired, according to agreement, on the understanding that he was only to practise as a consulting practitioner, and half the fees so obtained were to go to the plaintiff. Since the termination of the partnership it was alleged that the defendant had practised otherwise than as a consulting practitioner. For the plaintiff, witnesses were called to speak to the fees that should be received by a consulting practitioner, which, according to the plaintiff, should not have been less than one guinea in the town and two guineas outside, whereas the defendant had made smaller charges. For the defence several medical men, among others Mr. Gay, member of the Council of the College of Surgeons, and Dr. Shapter, of Exeter, were called, who gave evidence generally that the defendant's mode of conducting his business was not inconsistent with the generally understood practice of a consulting practitioner. The defendant had paid into court a sum of £35 as the half of the fees earned by him, which was due under the agreement to the plaintiff. The case ended in a verdict for the defendant on all points. The plaintiff's view of consulting fees is that generally adopted by the profession, and should not lightly be disregarded by consulting practitioners.

SMALL-POX IN PORT.

WE are weary of recording instances to show the necessity of prompt action under the Port Sanitary clauses of the Public Health Act, but it is a duty to do so, in order to prove not only how necessary these clauses are in the interest of the metropolitan populace, but also to indicate how little their working is likely to inconvenience commerce in our ports.

Ten days ago a vessel arrived at the mouth of the river from Cronstadt, with a severe case of confluent small-pox on board. The Customs authorities at Gravesend could not stop the ship, but very properly directed the captain to communicate with the district health officers as soon as he got to moorings. So the ship proceeded up the river, was "fixed up" in one of the most frequented parts of the port, alongside other vessels, and forthwith began to discharge her cargo. Two other men presented symptoms of the disease on the following day, but we have not been informed whether, or how soon after arrival, they and the confluent case were removed. Anyhow, the vessel was lying in a crowded part of the river for nearly twenty-four hours, with small-pox on board.

Two days afterwards the master of a vessel lying in Bugsby's Hole, off East Greenwich, applied to the medical officer of that district, as two of his sailors were affected with the disease. The sum of the matter of course is, that if the City authorities had their machinery in working order, these vessels, as *The Times* remarked, "would (or should) have been stopped at Gravesend, the sick removed, and the decks and cabins thoroughly fumigated, in accordance with the directions given by the Medical Department of the Local Government Board."

SALARIES OF HEALTH OFFICERS.

IT is very desirable, in arranging preliminaries in connexion with the working of the Public Health Act, that the Local Government Board should, among other things, give some sort of indication as to the scale of remuneration to be granted to medical officers of health. We are informed that the ideas of town councils, boards of guardians, and other bodies who will be entrusted with the working of the Act, are very hazy indeed on this subject, mainly, as we can readily imagine, because it is almost impossible to tell how much work will have to be done in any particular district. But there can be little doubt that the permanent professional staff attached to the Central Department must be better acquainted with the probable sanitary requirements of both urban and rural districts, and so could give valuable advice which might assist to settle the money question. If some sort of scale be not adopted, we are convinced that confusion worse confounded will be the result, and that more time will be spent in squabbling over finance than in considering the best means of putting the law in action.

THE NORTH SURREY SCHOOLS.

THE Clapham Board of Guardians have adopted the Report of a Committee deputed to visit the above schools at Penge, which shows that they are in a very unsatisfactory condition. The Committee "were deeply impressed with the general air of discomfort prevailing in every part of the establishment, and regretted to observe the want of proper arrangements, want of ventilation, want of sufficient accommodation to separate children in different stages of disease, want of cleanliness, imperfect drainage, and the utter failure in the carrying out of what they had understood to be the resolution of the Board in its general management. The Visiting Guardians regret to have occasion to report their great dissatisfaction on the state and conduct of the infirmary in the North Surrey schools." Mr. Hansom, one of the Committee, after referring to a very bad case of ophthalmia, said there was a want of management and authority in the whole establishment. The supply of hot water was so deficient that two children having different diseases had to be bathed at the same time. The towels were like floor-rags. Mr. Barringer, though refusing to sign the report, and maintaining that the cases of ophthalmia were less severe now than years ago, admitted that the children were not well looked after. Mr. Poupart said he had been a visitor for a good many years, but he must say he was never so dissatisfied as on this visit; there were

more dirt and illness than he had ever seen before. The children, he asserted, were underfed. Mr. Dagnall did not believe a better ventilated establishment could be found. The Report was adopted, and a copy ordered to be sent to the Local Government Board.

It would be premature to assign blame for such a discreditable state of matters. What must have been the case years ago, that this can be an improvement upon it? We have hope that the medical officers will be able to demonstrate their irresponsibility. Whether or not, the case is one calling for a complete and impartial investigation. Hot water, towels, and baths, are surely commodities of which even pauper children should have plenty.

HEALTH OF EDINBURGH.

MR. W. T. THOMSON has had to abandon his thesis that Edinburgh is nearly the unhealthiest city in the world, and to confess that many other Scotch towns are "in the same condemnation" with Edinburgh. But Scotch towns are no worse, indeed rather better, than English towns of a similar size—a fact which removes Edinburgh still further from the exceptional position in which Mr. W. T. Thomson would place her. Take the Registrar-General's returns as to the health of twenty-one cities of the United Kingdom the week before last. These show an average of 27 deaths per 1000. During the same week the deaths in Edinburgh reached 100. Now, the population of that city, as estimated rather more than a month ago, was 204,982, or very nearly 205,000; and, therefore, if there is any truth in arithmetic, 25 deaths per 1000, or 2 per 1000 below the average of cities in England and Scotland, is the mortality to be ascribed to Edinburgh. It does not serve to cover Mr. W. T. Thomson's retreat to tell us that in Edinburgh the death-rate rises above the English Registrar-General's standard of 17 per 1000. If such is the "normal healthy district annual rate," then every other large town, not only in Scotland, but in England, is generally worse off than Edinburgh—rarely superior to her. For the last ten years in not one English county has the death-rate been so low as 17 per 1000, whereas in Scotland the mortality during the same period has been in rural districts 17, in small towns 21, in large towns 25, and in principal towns 28 per 1000, Edinburgh being the chief exception among the latter, as only once during the ten years rising even to the average of the large towns. Mr. W. T. Thomson should also know that the English system of registration, so far from being more perfect than the Scotch, has been this session assimilated to the latter by "An Act to Amend the Law relating to the Registration of Births and Deaths in England." From the report on the last English census it appeared that about 37,000 deaths in England must have been unregistered, a result which has no parallel in Scotland, where registration of death is exacted from the relatives of the deceased or other persons "under a penalty not exceeding forty shillings." In its 12th clause the Act we have just referred to adopts for England this provision of the law of Scotland.

AUSTRALIAN MEAT.

NAPOLEON THE GREAT had much faith in reaching men's convictions through their stomachs; and this, the appropriate channel through which to make converts to an innovation in food, is being successfully employed in behalf of Australian meat. Banquets of which the *menu* consists entirely of dishes "raised" at the Antipodes have been given to numerous companies throughout England; and Mr. Tallerman, the enterprising and profuse Amphitryon of these culinary congresses, has much reason for self-congratulation. At Newcastle the other day he entertained more than one hundred ladies and gentlemen at a dinner composed of plain and vermicelli soups, lamb, boiled beef, mutton, and mutton hams (honey-cured)—all cold; seasoned mutton (from tins as imported), mutton stew (ditto), and beef *à la mode*. These, with English trimmings and other adjuncts, were all from Australia; which was also the source of the apricot-jam rolls, tartlets, puddings, and everything that comes under the head of pastry. The wines, moreover, were of Australian vintages—champagne, sherry, claret, malaga, and sheraz. The Lord Mayor presided, and the local clergy and others of the professional class were largely represented. The agreeable surprise prepared for them by Mr. Tallerman was enhanced by the satisfactory reflection that, in the present panic as to the rising price of meat, a wholesome, palatable, and cheap substitute for that viand was now within reach of all. Even without the stimulus of low prices, the Australian meats have acquired a hold on public predilection, 12,000 tons being the quantity imported last year, as against 4½ tons in 1866. The largest consumers are among the middle class—an excellent sign; while the lower, true to their jealous traditions, are slowly but steadily being converted to the novelty. The reappearance of the cattle plague ought to add another inducement to the more general consumption of an article which has really nothing but prejudice to encounter, and has already proved of high nutritious value in the gaol, the workhouse, the hospital, the asylum, the camp, and the fleet.

THE METROPOLITAN POLICE.

MR. TIMOTHY HOLMES gives this year a very good account of the force under his charge. The past year was marked by one of the most severe and protracted epidemics of small-pox recorded in the history of the metropolis; but the success that attended the chief surgeon's efforts tends to show the efficiency of vaccination, and the happy results of professional care and watchfulness. It appears from the tabulated statement that in 1871 a total of 8969 sick were entered, 6121 of whom resumed and 2117 continued duty, 413 went on sick leave, 41 were detached, 239 were pronounced unfit or resigned, and 38 died. During the year under consideration only 42 cases of small-pox occurred in the force, owing doubtless to the very complete system of revaccination carried out under Mr. Holmes's direction. The causes of invaliding are very well stated; and there is a clever *résumé* of the report, in which some alteration in the form of the returns is indicated. The report is brief and well worthy of perusal, but no special notice occurs as to a very important branch of the force—namely, the Thames police. Any of our readers who care to read Mr. Colquhoun's work on the subject will see how much this body of men have contributed to the maintenance of order, civil, commercial, and sanitary, in the port of London.

THE SANITARY CHAMPION OF THE EMERALD ISLE.

ONE of the most brilliant and skilful addresses delivered at the recent meeting at Birmingham was that of the Rev. Dr. Haughton, who did battle most valiantly for the wrongs of "ould Ireland." Our poor sister isle seems to get very few of the loaves and fishes in any way, and aids to the prevention of small-pox form no exception to the rule. After giving some very curious and clever statistics as to the comparative mortality from small-pox in various towns and districts, Dr. Haughton reminded his audience that whilst nearly £20,000 was properly spent in providing the people of England with gratuitous vaccination, only

£400 annually is expended in Ireland on the same object. An application ("the most humble application," said the speaker, "that could be conceived—such an one as only negroes and Irishmen could make") was forwarded in 1852 for £600 more, but it was refused by the Poor-law Commissioners. When we know that up to the present time 1581 deaths have occurred in Dublin, and that for the last thirteen weeks the people in Cork have been dying from the disease at the rate of 23 per 1000 per week, we must record that the forcible description of the Professor was by no means too highly coloured. In treating of the evidence of professional witnesses in the civil and criminal courts of law, the remarks of Dr. Haughton were equally terse, pointed, and happy. We know him to be a particularly hard nut to crack in the witness-box, and, indeed, his astuteness and geniality, no less than his scholarly acquirements, go to form in Dr. Haughton a very excellent champion of the Emerald Isle.

SANITARY REPORT OF THE LOCAL GOVERNMENT BOARD.

DR. A. D. HOME, one of the medical inspectors on Mr. Simon's staff, has recently paid an official visit to the village of Croyde in North Devon, it having been intimated to the Local Government Board that enteric fever was seriously prevalent in the district. Croyde is situated near the west coast of Devon, about half a mile from the sea, and built at the bottom and on the sides of a narrow winding valley. The village is stated to have been, as a rule, exceptionally healthy; but in March a case of enteric fever was imported into the place; the disease attacked speedily other members of the family, soon became generally diffused, and up to the time of Dr. Home's visit twenty-two out of the sixty houses of which the village consists had been invaded and forty-seven individuals attacked, though no fatal case had occurred. The circumstances attending the extension of the fever were not far to seek. According to the inspector's report, "there is no sewerage of any kind, and no house drainage; slops are simply thrown outside the doors, or on the dung-heaps, which are close at hand or in some cases piled against the walls of the dwellings. Drainage from pigsties soaks into the ground close to the houses, against which in many cases they have been erected; and privies also are found built against houses, with their cesspits close to the foundations; while, in other instances, water carriage for the removal of excremental matters has been secured by building privies over the rapid brook which runs through the village." The water used in the village is usually procured from the aforesaid brook, and after heavy rains from private wells in the immediate vicinity of dung-heap drains. Dr. Home has naturally called the attention of the authorities to the Sanitary Act of 1866 (of which probably they were totally ignorant), and has made the usual recommendation. The above particulars fitly furnish the text of a discourse that might be preached upon the condition of many hundred English villages, fair to see, but superlatively whited sepulchres.

EARLSWOOD.

THE State, said Lord Derby the other day, is bound to protect those who cannot protect themselves; but the principle has yet to be extended to such charities as Earlswood. There the philanthropic function of rescuing the idiot and imbecile young is fulfilled to admiration, but its resources are all derived from voluntary, not State support. To convert such victims to its own vices from being dead weights on its hands into self-sustaining bread-winners, society has every reason to exert itself, and it is gratifying to know that the efforts made have already been rewarded with a fair measure of success. "There is no saying what an idiot can do till tried"; and certainly the system at Earlswood has succeeded where failure seemed the only possibility. One fact it has thoroughly impressed on the public mind—to wit, the educability of weak-minded children. This becomes more and more evident every year, and is conspicuous in the last Report. As a consequence the number of inmates is increasing, 538 being the sum total for the present and 524 for the previous twelve months. The list of employments or handicrafts to which the imbecile boy or girl is trained is not less gratifying—288 male children having qualified to become tailors, or shoemakers, or carpenters, or basket-makers, or gardeners, and so forth; and 177 female children being similarly taught feminine work. Many pupils have been discharged, almost every one of them more or less improved. One, after about twelve years' residence, had so profited by the discipline that the Lord Chancellor decided that he was quite capable of looking after his own affairs. The general health of the Asylum continues to attest its superintendent's vigilance and skill—scarlatina and measles, epidemic in the neighbourhood, being scarcely felt; and small-pox, also epidemic, unknown within the Asylum walls.

WATERSIDE NUISANCES.

WE question whether metropolitan officers of health, among their multifarious duties, take sufficient cognisance of, or keep enough watch and ward over, waterside nuisances. There are sundry navigable tributaries of the Thames, to wit the Regent's Canal and the river Lea on one side, and the Surrey Canal and the Ravensbourne on the other, in the corners and angles of which, as they worm their way along, fringed by wharves and warehouses, may be found odoriferous heaps of all sorts of abominations. That ubiquitous craft commonly called a "Rochester barge" finds its way into all these angular mooring places, and takes in or discharges a cargo of manure, bones, or street-sweepings quietly, pleasantly, and leisurely. Several foci of nuisances were found along the Thames in 1866, during the last epidemic of cholera, and, as they are discovered much more easily from the river than from the shore, it may be fairly anticipated that when the port sanitary clauses of the Public Health Act take effect in the Port of London, the water authorities will co-operate with those on shore, and assist to empty, sweep, and garnish many waterside holes and corners that militate alike against the health of the urban and of the floating population.

ABERDEEN LUNATIC ASYLUM.

As befits a well-appointed medical school, Aberdeen has an excellently-conducted lunatic asylum, which subserves the purpose not only of receiving the insane, but of affording opportunities of clinical study. The report of the institution for 1871 represents the number of patients for the year as 594, and the daily average as 438, the number of females being considerably in excess over the males. The medical results of the year were very favourable. There were 143 patients removed, while only 22 died. The great bulk of the removals were cases of recovery, amounting to 52½ per cent. on the admissions, a proportion not only above the average of the asylum, but above the average of Scottish asylums in general. Wisely, as we think, 59 were removed after all hope of benefit in their cases had ceased, many of them returning to their relatives, and others being transferred to parochial guardianship. Inclusive of deaths, the total removals have more than counterbalanced the admissions, "so that the institution in its working has

really more fulfilled its higher function of Maison de Santé than its less creditable service as a place of reception and detention." No accident or unpleasant occurrence marred the even tenor of the year, while entertainments of a recreative and instructive kind contributed much to the well-being of the inmates.

A LEARNED "MENU."

A GREAT dinner was given on the 1st August at Munich, in the hall of the Odéon, in celebration of the fourth centenary of the foundation of the University. The *menu* was written in Latin, and is worthy of being recorded for the edification of the learned alike in the humanities and in gustatory matters.

"SYMPOSIUM.—*Gustatio:* Pisciculi oleo perfusi et salmones fumo siccati ad cibi appetentiam excitandam. *Mensa prima:* Jus pingue testudinaceum, carnali succo Liebigiano conditum. Salmones Danubiani, qui Rhenanos saporis gratia facile vincunt, cum liquamine et bulbis rotundis Americanis. Bovini lumbi assi, omnibus horti olitorii deliciis coronati. Caro ferina inter fungos natans, opere pistorio inclusa. Squillæ cum vitellis, oleo et aceto in unum mixtis. Capones pingues ex incluta urbe Ratisbonensi advecti. Pisa novella coctura Apiciana macerata. *Mensa secunda:* Placenta maior dulciaria, opere tectorio sigillis aliisque artificiis mirabilem in modum ornata. Figura pueruli Monacensis (a barbaris dicti *Münchener Kindl*) Praxitelis ingenio inventa et ipsius manu expressa, quæ, ut Alpes transcendit—proh dolor!—frigorum vi correpta et conglaciata est. Frugum regionis glacialis genera varia, botanicorum oculis et studiis nunc primum proposita.—Vinum dulce Hispanicum, molle Silvestre; mite Burdigalense; fortius Palatinum ex vineto Jesuitarum depromptum; ex castro Rosario oriundum; spumans Campanum."

The turtle soup prepared with Liebig's extract of meat doubtless was a tribute to the distinguished Munich chemist, but it may be questioned whether Horace would not have carped at "Liebig's extract" as too vulgar a commodity for exquisite feeding. The Latin version of "vol-au-vent de gibier aux champignons" is a true *chef d œuvre* of periphrasis; and the "bulbis rotundis Americanis" for the modest potato is very good. A sharp shaft is doubtless hidden in the "fortius Palatinum *ex vineto Jesuitarum* depromptum," served at a dinner during which Dr. Döllinger would no doubt be toasted.

NEW MICROSCOPIC SLIDE.

AT a late meeting of the Biological and Microscopical Section of the American Academy of Natural Sciences, reported in the *Philadelphia Medical Times*, Dr. Hunt called attention to an ingenious slide invented by Mr. D. S. Holman for exhibiting infusoria, especially under the gas microscope. These slides are made by grinding a deep depression in a thick slide, and then making a very shallow circle all round the deeper central cavity. If the central depression be filled with the organisation in water which is desired to be studied, and covered with a thin glass, in a short time the shallow circle all round the margin will be filled with minute bodies, often zoospores or other objects in the life history of the object in the deeper cell. The pressure of the atmosphere retains the cover in position.

THE TEWKESBURY RURAL HOSPITAL.

THIS is a gratifying instance of a Cottage Hospital growing in reputation and finally needing to be superseded by a Rural Hospital. The latter has just been opened under the auspices of the Lord Bishop of Gloucester and Bristol, and promises to be a very useful institution. We regret to note that the medical arrangements are not such as to command the approval of the profession generally in the town. The great object of such arrangements should be so to affiliate the medical men with the hospital that they all take the duties of it in rotation. In this way they all feel an interest in the hospital. There is a rivalry amongst them to do their professional work well; and no jealousy is occasioned by one man having the exclusive advantage of a hospital connexion. At Tewkesbury a different course has been followed, and one practitioner, Mr. Devereux, is the sole medical officer. In our opinion this is a narrow and most objectionable plan, by which the Rural Hospital is injured, and half the good it is calculated to do is prevented. With this qualification the institution is one worthy of all praise and success.

THE THAMES AND ITS TRIBUTARIES.

AN annotation that appeared in THE LANCET on the 10th inst. has aroused the wrath of the "riparian" authorities along the banks of the Thames to a very considerable extent. We published last week an official denial of any statement connecting the inhabitants of Teddington with Thames pollution, and hereby congratulate them. "Kingston, Richmond, and Wimbledon have all made *bonâ fide* attempts to obey the law laid down for their observance, but all their efforts have proved futile." We condole with them accordingly. But it is fervently to be hoped that, as by Sir J. Kay-Shuttleworth's exertions the conduct of the Metropolis Water Acts is transferred to the Local Government Board, and the City Corporation has, under the same Act, sanitary control of the Thames from Teddington downwards, some sort of persuasive screw will be employed to induce the authorities of the waterside towns to divert their sewage into some more convenient and more profitable channel.

THE ADULTERATION ACT.

THE Act to amend the Law for the Prevention of Adulteration of Food, Drink, and Drugs has just received the Royal assent, and has thus consummated a work commenced long since in the pages of THE LANCET. It is hardly necessary to recapitulate *seriatim* the provisions of the Act. Adulteration is very properly classed as a crime, and is dealt with accordingly. The Pharmacy Act of 1868 is to be incorporated with the statute, analysts are to be appointed, and inspectors of nuisances may submit articles of food to be analysed by them. The expense of executing the Act is to be defrayed in the City of London out of the funds raised by the Commissioners of Sewers, in the rest of the metropolis out of the local rates, and in counties and boroughs out of their respective rates. The consumers of food will find this Act a great boon, if its provisions be honestly interpreted and faithfully carried out.

LIVERPOOL REFUSE.

AT the quarterly meeting of the Liverpool Town Council held last week, the subject of refuse disposal was brought under consideration by a proposal from the Health Committee to make arrangements for the deposit of the refuse of the northern part of the town on land at Ainsdale. It was stated by Dr. Taylor, who introduced the subject, that during the past year the quantity of night-soil, street-sweepings, and ashes which the scavenging committee had to dispose of was 210,828 tons, whereof 63,715 tons were deposited in places in the neighbourhood of Liverpool. The out townships had now set their faces against these deposits, and the committee are compelled to go further a-field. Prompt action, too, was evidently necessary, for the superintendent of scavenging had reported that unless provision was made for the disposal of the refuse this winter, he could not be responsible for the consequences. The pro-

position of the Health Committee was adopted, it being tolerably clear that the matter was too pressing for postponement until some more perfect method of utilisation could be arrived at.

CONTAGIOUSNESS OF PURULENT SECRETIONS.

DR. HILLER, in an inaugural dissertation on this subject, maintains the truth of the old view that all purulent secretions are contagious when applied to healthy mucous membrane. He states that pus taken from the vagina of a bitch in which inflammation had been excited by the injection of ammonia produced pyorrhœa in the urethra of a dog into which it was injected, though not before the latter had been mechanically irritated. If no mechanical irritation were employed no catarrh occurred. The pyorrhœa both in the male and female animal appeared to be closely analogous in its nature to gonorrhœa, since it spread in the former to the posterior part of the urethra, and in the latter to the mucous membrane of the uterus. M. Hiller holds that the same obtains in the case of the eye, and that all purulent discharges applied to the conjunctiva are capable of exciting inflammation in it. It is certain, however, that the matter from an inflamed lachrymal sac, or from an abscess of the lid, may freely enter the eye without producing a purulent discharge.

TREATMENT OF SNAKE-BITE.

MR. T. H. WEBB, resident surgeon of the Creswick Hospital, writes to the *Australian Medical Journal* touching the treatment of snake-bite by the injection of ammonia into the veins, and he makes the following startling remarks on the careless use of the hypodermic syringe:—"The enormous ulcers this caustic creates, the way it burrows, destroying the cellular tissue wherever it touches it, is something incredible. Twice in as many years have I had to ligature the brachial, above and below, for sloughing into the artery, and in both cases have the patients nearly lost their arms from gangrene, and their lives from hæmorrhage." He gives the case of a man who had been "hypodermically injected with ammonia; as might naturally be expected, wherever the caustic has entered, an ulcer remains. And such ulcers! One could almost pursue a course of muscular anatomy on his feet, legs, and thighs, whilst at the bend of the elbow the deepness and extent of the slough has compelled him to constrict his brachial. He may well say, 'The evils that it hath pleased Heaven to affect me with I could have borne, but the evils *plus* their remedies—impossible.'" "I declare most emphatically," continues Mr. Webb, "that instead of the venous injection being a little operation, which anyone can on an emergency perform, it is one that none but a surgeon should attempt, and yet I have several times seen hypodermic syringes in the possession of laymen, kept for the purpose, though how they were going to use them Heaven only knows."

VERMIN POWDERS.

VERMIN POWDERS are attaining an unenviable notoriety. No one at all conversant with newspaper reports can fail to be struck with the great number of suicides by means of these agents. They contain one of our deadliest poisons, strychnine, and are sold for so trifling a sum of money that there is no limitation to their use as an instrument of self-destruction. Any person possessed of a few coppers and bent on *felo de se*, has only to go to the nearest druggist or grocer and ask for vermin-killer, to find himself in possession of a lethal weapon, compared with which all the poisons of the Medicis were as rose water. We think it high time that some check should be put upon the sale of such an article as we have described. Vermin may be killed by means which are, as related to strychnia, almost innocuous to human life. We may indicate such agents as sulphurous gas, carbolic acid, lime, tobacco, &c., which would prove sufficiently potent to destroy vermin. The vermin for which these powders are generally purchased are rats; and Mr. Buckland's recent experiments with his asphyxiator demonstrate with what ease a house may be cleared of them by means of sulphurous gas. And, again, if landlords took greater interest in their poverty-stricken tenants, they might even, by a vicarious supervision of their houses, mechanically stamp out such vermin as rats. A few shillings expended in closing up all orifices from drains and sewers would often obviate any recourse to vermin powders.

COTTAGE HOSPITAL FOR BIDEFORD.

THE Cottage Hospital movement appears to be gaining in popularity, Bideford being the latest to acknowledge the want of such an institution. An influential meeting was recently held in the town for the furtherance of a project to establish a ward in connexion with the local dispensary, the latter charity having been established twenty years, a tolerable proof of its vitality. It is now proposed to enlarge the dispensary, so that accommodation may be provided for six or eight patients; and an intention was expressed at the meeting of making it to a certain extent self-supporting, by charging each inmate 3s. 6d. a week towards maintenance. An amendment, that provision should only be made for "emergencies," which we presume to mean accidents, was lost. While conceding the immense benefit of cottage hospitals to small towns, we would also point out the necessity for restrictions and regulations which shall obviate any attempts towards the abuse of such charities, and that the medical officers, who invariably give their services gratuitously, should be freely consulted upon all matters of administration, and their suggestions acted upon.

HEALTH OF WHITEHAVEN.

JUDGED by its death-rate, the town of Whitehaven has been, for some time past, in a very unhealthy condition. For the four weeks ended July 6th, the mortality was at the rate of 35 per 1000; "very much higher than it ought to be at this season of the year," the medical officer reports. Small-pox was epidemic, following an epidemic of scarlet fever: the former disease appears to have been introduced into the town from on board a ship, and, finding a fruitful soil, it spread rapidly and destructively. Of course vaccination was then eagerly sought after, the loss of the steed being in this case, as usual, necessary to make people believe in the importance of safely shutting the stable door. The epidemic continued to prevail in the subsequent four weeks (ending August 3rd), but the medical officer, Mr. Lumb, thought that the virulence of the disease had somewhat abated, and the death-rate had fallen to 27 per 1000, which is still far higher than it ought to be.

THE PONTEFRACT ELECTION.

WE have reason to believe that Mr. Childers would not have had such a severe fight at Pontefract but for the determined opposition of the Anti-Contagious Diseases Act party, inspired, if not assisted, from without, and urged on by a body of canvassers who worked like men that were paid for their work. Mr. Childers felt the necessity of resisting this opposition plainly, and addressed a hall full of men on the subject. The Anti-Contagious Diseases Act

party are entitled to their own opinions, but they might safely leave constituencies to reckon with their own candidates upon such matters. They are injuring themselves by their tactics more than their opponents.

LADY BUTE.

THE convalescence of the Marchioness of Bute is established. On Tuesday, her Ladyship left her room for the first time, and it is hoped that in a few days she will be able to go out of doors, and by the end of next week to proceed to her residence at Mount Stuart, Isle of Bute.

HEALTH OF ROME.

ROME abounds in fever cases, while the accommodation of the hospitals grows daily more inadequate to their reception. Within the twenty-four hours as many as 100 apply for admission, but are refused. Three convents have been expropriated and filled with beds for the surplus cases. It is among the *employés* and other arrivals from Northern Italy, who are not accustomed to the climate, that the fever most largely prevails. Even for Rome the heat for the past fortnight has been extraordinary. Meanwhile the health of the Pope continues good, though the heat detains him within doors, and the political situation deprives him of his daily drives in the evening.

THE Central Park of New York, already animated by the sculptured presence of Humboldt and Morse, will shortly possess another attraction in the proposed statue of Dr. Livingstone. The statue, colossal in its proportions, is finished, the artist being Mrs. Amelia Hill, relict of D. O. Hill, the well-known Scottish painter and academician. Dr. Livingstone sat to Mrs. Hill before leaving on his present enterprise. The design is admirable, and the execution highly meritorious. The missionary explorer stands with outstretched arm, grasping a bible; while a revolver beside him attests the risks he encounters—like the builders of the wall of Jerusalem, with the trowel in one hand and the sword in the other.

DESPITE its notoriously bad drainage and the perennial effluvia from its sewers, Malta has been healthier this season than is its average, and up to the present has escaped all epidemic visitation. Still the station is by no means satisfactory in point of hygiene. Two officers of the 18th Regiment have died of "Malta fever," and cases of the malady are prevalent among the garrison. Small-pox, however, is reduced to a minimum.

AT a recent inquest held at Whitechapel, several of the jury animadverted on the disgraceful state of the coffins in which paupers were buried, the shells being described as thin rotten boards. At the coroner's suggestion, a resolution was passed drawing the attention of the parish authorities to the matter. We trust that Bumbledom will strain a point to give their unfortunate fellow-beings at least a decent burial.

THE mortality last week in London and twenty other large towns was at the rate of 25 deaths annually to every 1000 of the estimated population. In the metropolis, the deaths from diarrhœa amounted to 270, being a considerable decrease on the deaths in the previous week.

DR. EVORY KENNEDY, of Dublin, will contest the City of Derry on extreme Liberal principles in the forthcoming election, necessitated by the elevation of Attorney-General Dowse to the Bench.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

MEETING AT BRIGHTON, AUG. 14TH TO 22ND INCLUSIVE.

FOR the first time in the annals of the Association Brighton has been selected for the annual gathering, and if any misapprehension as to success at one time existed from its being a suburb of the metropolis, it has been wholly dispelled by the very large assemblage from all quarters of the kingdom. And indeed Brighton has not been behind any other city in the cordial and warm reception it has given to the Association, from the Mayor downwards. This municipal office is filled by a member of our profession, Mr. Cordy Burrows, whom Sir Roderick Murchison, had he been living, would have called a "model mayor," for he left no stone unturned to make the Association, in its fullest sense, thoroughly welcome, to say nothing of his own unbounded hospitality. The town of Brighton has been able to offer, too, a feature of novel and great scientific interest, the opening of which was inaugurated by the Association—namely, its Aquarium, which proved a never-ceasing fund of amusement and instruction during the whole of the meeting. Matters of professional interest have been, on the average, fairly good, but the number of papers read was exceedingly small, some days passing without any at all, and all the papers contributed were from persons who resided at a distance from the place of meeting. The residents of Brighton therefore are to blame to some extent for the poverty of material in the department of Anatomy and Physiology belonging to the section of Biology. The reverse was the case last year at Edinburgh, where indeed there was an *embarras de richesse*, and almost an impossibility of getting through the large amount of work upon the above-named subjects.

Dr. BURDON-SANDERSON delivered, on the second day, an able introductory address in the department of Anatomy and Physiology. In this he stated that although we English physiologists must admit with regret that we have had very little to do with the unprecedented development of our science during the last two decades, we do not intend to continue the same inactive condition for the future. Considering, he said, that the purpose of the meeting was to promote the progress of physiology, he did not think he could more properly occupy the time of his hearers than in endeavouring to show in what direction efforts must be made to improve its position, and particularly to secure a future more fruitful of substantial results than the past had been. He began by asserting a general principle, which as he went on he endeavoured to justify—that the reason why physiological research was less successfully pursued in England than we could wish it to be lay in the general want of scientific education. In illustration of this position he referred first to that higher training which is required for the production of scientific workers or investigators; secondly, to what may be called the education of public opinion by the popularising agency of books and lectures; and, lastly, to the introduction of natural science as an element of education in our great schools and universities. In considering the training of scientific workers, he said, if a man wants to be a physiologist, he must, as things at present stand, study medicine, for which he gave his reasons.

In proposing a vote of thanks, Professor MICHAEL FOSTER expressed his dissent from the opinion that the connexion of physiology and medicine would necessarily have to be maintained for years to come, and strongly recommended the former subject as a fitting one to be included in the education of ladies.

A Report on the Heat of Arterialisation, by Dr. Gamgee, was deferred until next year, as he had not completed his investigations.

"The Arrangement of the Lobes of the Liver" was the subject of a highly valuable communication by Professor FLOWER, who alluded to the great diversities in the arrangement of the lobes of the liver in different animals, which he illustrated by numerous coloured diagrams. He had ex-

amined the liver in a large number of animals, and now gave the results he had arrived at, mentioning at the same time that the homologies of the lobes of the liver had been considered by Professor Rolleston in 1861. He suggested that, in studying these arrangements, the principal thing was to look carefully to the great bloodvessels around which the hepatic substance is grouped, taking the umbilical vein as the central starting-point. A typical diagram of the liver was given, which he described as having a left and a right lobe; the left was divided into a left lobe and a left central lobe, and the right was divided into a right lobe and a right central lobe; then there was the Spigelian lobe and the caudate lobe, which he preferred to retain. In this general type every known liver can be placed, and he entered into numerous details with a view to systematise the arrangement of the lobes in various animals, so that the parts may be more accurately described by anatomists than they have hitherto been. In dwelling upon some of the diagrams he showed that in the dog and sheep the caudate lobe was largely developed. Only one or two animals offered a difficulty, as, for example, the two-toed sloth, but in that animal the enormously developed Spigelian lobe could be made out.

In the discussion which followed, Professor STRUTHERS stated that the liver in the human subject is very unequally divided, the right lobe being much smaller than the left, and he thought that this might have some relation to the strength of the right hand as compared with the left. The old system of tight lacing often induced changes of form in the liver, and sometimes it gave rise to an additional fissure. Professor MICHAEL FOSTER had always a dim idea of the liver, but could understand it now from the author's division. After some remarks by Dr. PYE SMITH, Professor VAN BENEDEN said he thought the author's observations would dispel much of the uncertainty hitherto prevailing regarding the liver.

Professor STRUTHERS made a communication upon the occurrence of the Supra-condyloid Process in man, and exhibited a number of bones and dissections showing its presence in the human arm, to which special interest attaches from its mention in Mr. Darwin's recent work. This little projecting spur, just above the elbow, occurs much more extensively than has been generally supposed. He found it once in about fifty times; and it may be observed in a very rudimentary state in almost every subject. He pointed out that in the carnivora, the cat for example, it formed a complete bony arch, through which the artery and nerve passed. The late Dr. Knox was the first who had the merit of drawing attention to this process in man, in whom a fibrous continuation is found forming an arch. Professor Struthers has recognised it in the living body; and it would seem to be hereditary, for he has found it in the parent as well as the child. It was impossible, the Professor said, to explain this variation on the old ideas of final cause and type, and it was a strong piece of evidence in support of the doctrine of evolution. In some animals the process had doubtless a specific function to fulfil, but in man it served no purpose whatever.

A paper by the same gentleman was "On the Sternum and Pelvic Bones of the Right Whale, and in Great Fin Whales," showing great variations in form even in the same species. Last year he described a sternum of one of the latter, with its large median process, and now he exhibited one of the same species which had a large and deep notch on its upper surface instead of the median process. He mentioned a curious circumstance in the osteology of whales, namely, that they were liable to rheumatism. He had seen many examples of rheumatic ostitis in whales of different kinds. It had been said that animals were not subject to disease until they were brought into connexion with man, but the fact above-mentioned contradicted the theory. It was the more remarkable, too, seeing that whales were less liable than man to variations of temperature; and the cold water cure (as a witty friend had observed) did not seem to be efficacious in the cure of the disease in question.

"The occurrence of Finger-muscles in the Bottle-nose Whale (*Hyperoodon bidens*)," formed a third communication by the same gentleman. A dissection of the paddle or fin of a whale of this species, made last year when quite fresh (a male 20 feet long), was exhibited to the section, showing the presence of finger-muscles corresponding to those in man, and also the biceps muscle transferred from the scapula to the head of the humerus. These finger-muscles were first described by Professor Flower in the fin whale, and were said to be absent in the dolphin whale; but as now seen they were found to be actually much better developed than in the great finner. A piece of the gum of the lower jaw was likewise shown, in which a concealed tooth was sunk about half an inch below the surface.

Professor FLOWER attributed the great variations in the pelvic bones and the sterna of the whale to their rudimentary character. A warm vote of thanks was given to Professor Struthers for his interesting communications.

A paper was now read by Dr. JAMES ROSS "On the Graft Theory of Disease," the object of which was to draw a comparison between the effects of grafting and the phenomena of contagious diseases.

This was followed by another, "On the Concurrent Contemporaneous Progress of Renovation and Waste in Animated Frames," by Mr. GEORGE HARRIS. The general object of the paper was to show that certain causes tending to produce renovation and waste are controllable by human skill, and that they would become still more so by increased chemical and pathological knowledge. In the case of animated bodies, the hardening of the cartilages and deterioration of the blood appeared to be the principal causes of preventing renovation and accelerating waste; and there was little doubt that certain artificial appliances would, to a considerable extent, affect those conditions so as to restore waste, and effect renovation, and thus greatly prolong the period of human life. The paper was severely criticised by Mr. RAY LANKESTER and Dr. GAMGEE as a mere speculative production, and a collection of random assertions. And the chairman, Dr. SANDERSON, denied the statement of the author, that death was materially influenced by the ossification of the cartilages, and the deteriorated condition of the blood.

Dr. RADCLIFFE contributed a paper entitled, "Whether the Causes of Vital Movement are yet clearly appreciated." He gave a *résumé* of the opinions of ancient and modern writers on the subject of vital movement, and ridiculed the current doctrine, which assumes that vital movements are distinct from those manifested by inert matter, and which can at best, he said, be only regarded as a hasty deduction from superficial observations. The highest aspirations of philosophy, he contended, are in direct contradiction to this assumption; and the doctrine of the correlation of physical and vital forces implies a grand centralisation, by which what have been regarded as separate forces are made to appear as various aspects of some central force. He then referred to some investigations which he had recently made with Sir William Thomson's electrometer, and which had tended to confirm the views of Galvani. He mentioned, by way of illustration, a singular experiment that he had made with a strip of india-rubber, coated on two surfaces with metal, which was elongated by the attraction of two opposite charges, the discharge causing the india-rubber to contract to its original length.

A paper of some interest was read in the Geological Section by Mr. G. A. LEBOUR, of the Geological Survey, "On the Distribution of Goitre in England, geologically considered." He stated that goitre was absent on tertiary rocks; it was present slightly, and in a scattered manner, on chalk, lower greensand and Weald clay, and Hastings sand, coinciding with the presence of sulphates of lime and magnesia in common with iron. It was absent on the oolites, and also on the lias, with one exception. It was absent on the new red sandstone, and present very slightly on the magnesian limestone. It was absent on the coal measures and millstone grit; present on the carboniferous limestone, but absent on the older rocks and on the igneous rocks.

Numerous other papers of interest were read, which the exigencies of space and of purely professional matter will not permit us to enumerate. The meeting may be considered to have been a remarkable success, both from a scientific and a popular point of view. The lay press has made our readers thoroughly conversant with all contingent and incidental matters; but we cannot conclude our notice of the meeting without a word of praise to Dr. Carpenter for the excellent manner in which he performed a somewhat difficult *rôle*, and a hearty word of encouragment to the gallant young American, to whose "grit" and "dering-do" we owe the discovery of Livingstone.

THE DUST-YARD, THE DISTRICT BOARD, AND THE SOUTHWARK WATER COMPANY.

A PARLIAMENTARY paper moved for by Mr. F. S. Powell, and recently issued, may be commended to notice, as involving some important questions in reference to metropolitan sanitation. It is a copy of a report by Mr. Netten Radcliffe on the existence of a nuisance in close proximity to the works of the Southwark and Vauxhall Water Company at Battersea. The company's works are situated on the south bank of the Thames, having for their western boundary the lines of railway which converge at the bridge leading to Victoria Station. At the north-west angle formed by the railway and the river is a small plot of land belonging to the London and Brighton Railway Company, which has been let to one of the dust and refuse contractors for the parish of St. George's, Hanover-square, who has used it for dust-sifting and other processes incidental to a depôt of that character. Close to the Battersea steamboat-pier and railway-station, and within fifty yards of one of the filter-beds of the Southwark Water Company, this refuse depôt was suffered to spring up, and in April last, when Mr. Radcliffe was instructed to report upon it, had been in existence some twelve months.

Upon his first visit (23rd April) there were three days' accumulation of refuse and manure at this depôt, and twelve to fourteen women were sifting dust, a process that gave off an odour "penetrating and offensive in the extreme, clinging long afterwards to the nostrils, and affecting the palate most unpleasantly." This odour was "offensively perceptible" from the embankment of the nearest filter-bed, as well as from the steamboat-pier and from the steamboats as they passed the locality. A filthy tidal ditch (receiving the contents of two open privies) ran between the depôt and the water company's premises, and the whole surface of the yard was "largely in a very foul state from the stalings of horses and the drainage of stables." Mr. Radcliffe, therefore, having regard to the situation of this depôt, reports that it "constitutes a nuisance of a very serious character;" and he adds that "with reference to the water company's works, the nuisance is peculiarly serious, for during northerly and north-westerly winds the pungent dust thrown up in the process of sifting must be scattered widely over the water in the filter-beds." It is a curious fact that the first discovery of this nuisance appears to have been made by those inhabitants of the parish of St. George's, Hanover-square, who live on the north bank of the river just opposite to the depôt, so that a complaint was made some time ago to the St. George's vestry from the Pimlico district of the filthy smells setting across the river when the wind blew from that quarter. The filth of St. George's parish is thus carried just outside the parish borders, and is deposited in an adjoining district, where it becomes a serious nuisance as well to a part of St. George's parishioners as to the district in which it is located. And hereupon Mr. Radcliffe submits for consideration the question of "the apparent irresponsibility of the vestries and district boards of the metropolis in regard to the place or places of deposit of the refuse collected in their districts, provided the refuse be removed beyond the limits of the district." The next remarkable fact in this business is, that although the nuisance at Battersea had been in existence for many months, the Wandsworth Board of Works, within whose district the depôt is situate, were entirely ignorant of it until brought officially under their notice. The nuisance inspection of the district was inadequate for its discovery; and neither the officials of the pier, the railway, nor the water company appear to have troubled themselves to make up for the want of vigilance of the district board. Attention is drawn in the report to "the indifference of the water company to the nuisance, although it was obviously dangerous to the purity of the water on the filter beds." It must for a long time have been patent, but "it does not appear that any efforts had been made by the water-company to obtain its removal, or that the company had complained to the Wandsworth Board of Works upon the subject." A visit to this dust-yard on the 3rd of July last served to confirm Mr. Radcliffe in his opinion of the danger of its proximity to the water-works.

The public are much indebted to Mr. F. S. Powell for getting Mr. Radcliffe's report out of the official pigeon-hole into the light of day. The short discussion which it elicited in the House of Commons cannot fail to be useful. According to Mr. Stansfeld and Mr. Chichester Fortesque, the water company declined to take action in the matter because, in their opinion, the purity of the water was in no way affected by the proximity of the dust-yard. But will any person capable of forming an opinion on the subject, and not interested on behalf of the water company, accept such a conclusion in the face of Mr. Radcliffe's report? It is not a chemical question at all: prove to-morrow that no traces of impurity can be discovered by analysis and you do not for a moment get rid of the fact that fine dust from the yard is blown over the filter-beds, and, having regard to the antecedents of that dust, common-sense insists that it should be kept as far away as possible from drinking-water. That the Southwark Water Company should have taken no steps for the suppression of this dust-yard almost within its own gates is another proof that the water supply of the metropolis cannot with safety to the public continue to be entrusted to public companies. As regards the Wandsworth Board of Works, we have left ourselves but little space to refer to their conduct in the matter. They have at least made a show of action by instituting proceedings last month against the contractor under the Nuisances Removal Act. The prosecution failed, it would appear, because the procedure adopted was not that best calculated to succeed; and we presume that it now rests exclusively with the district board to take further measures or not as they think proper. At any rate, Mr. Stansfeld says the Local Government Board have no authority to require the district board to do anything more.

We venture to hope that this most unsatisfactory chapter in metropolitan sanitary history will be well laid to heart by Mr. Stansfeld, and that he will be able to devise a remedy for a state of things which is at once discreditable and dangerous.

REPORT ON DR. CLERTAN'S PEARLS.

THE problem, how to enable patients to take even the most nauseous drugs without discomfort, is certainly solved in an admirable manner in these preparations. The various drugs, or their ethereal extracts, are enclosed hermetically in thin globular capsules of gelatine, of about three-eighths of an inch diameter. When once swallowed the gelatine envelope speedily softens in the gastric juice, and thus allows its contents to escape. The size of the globules or pearls must of course be such that they can be swallowed conveniently, and this limitation will, to a great extent, restrict their application, as a want of capacity would have to be made up by numbers, an alternative clearly inconvenient, if not impossible, in many cases. Their use is perhaps still further restricted by the necessity of having the solvent of the drug of such a nature as not to exert any action on the gelatine, and the only solvent fairly applicable which fulfils this condition seems to be ether. On the whole it will appear from the analytical details given below that in all cases in which the entire contents consist of the active agent these pearls may be of very great utility—as, for example, in the cases of ether, chloroform, and oil of turpentine; but that in all the other instances in which the contents consist of ethereal extracts the amount of the drug contained in any single pearl is quite insignificant, in consequence of which these pearls are practically useless as vehicles for such drugs.

Ether.—The contents of these pearls consist of pure sulphuric ether.

Chloroform.—Contents: pure chloroform, sp. gr. 1·49.

Thérébenthine.—Contents: pure oil of turpentine, perfectly colourless, and boiling at 156° c.

Castoreum.—Contents: an ethereal extract of castor, the solid residue from which may be taken as representing roughly from two to three times its weight of castoreum.

Digitale.—Contents: an ethereal extract of the dried leaves of the plant. No digitaline can be detected in the contents from six pearls; it is therefore present in excessively small quantity only, if at all.

Assafœtida.—Contents: an ethereal extract of resin, the residue from which may be taken as representing about twice the weight of crude resin.

Valérians.—Contents: an ethereal extract of valerian-root holding in solution chiefly essential oil and resin, and scarcely a trace of valerianic acid or its salts.

The following table gives the mean amount of substance contained in any single pearl, and it should be stated that pearls of one class differ but slightly from each other in this respect.

Nature of contents.	Mean amount of contents. By weight.	Mean amount of contents. In minims.	Amount of substance dissolved.
Ether	3·8 grains.	5·6	—
Chloroform ...	5·0 „	4·8	—
Thérébenthine.	5·0 „	5·7	—
Castoreum ...	3·6 „	—	0·15 grains.
Digitale ...	3·8 „	—	0·03 „
Assafœtida ...	3·8 „	—	0·20 „
Valériane ...	4·0 „	—	0·03 „

These pearls may be obtained of Mr. Jozeau, Haymarket, London.

Correspondence.

"Audi alteram partem."

"AN OBSCURE INJURY TO THE HIP."

To the Editor of THE LANCET.

SIR,—I hasten to correct some of your misstatements under the above heading in your "Annotations."

Mr. Buckley did *not* measure the limb from the trochanter to the ankle; but from the anterior spine of the ilium to the trochanter, and from the anterior spine of the ilium to the ankle, without finding any shortening.

Dr. Maclagan measured the limb within half an hour of the accident on the 11th of December, without finding any shortening; and put Mr. Balmforth twice under chloroform without detecting any dislocation or fracture.

I saw the plaintiff four days after the accident, and measured the limb carefully without finding any shortening.

The verdict of the jury was for 40s., not £40 (a compromise), for which we are indebted to four infirmary surgeons acting as you have done, in drawing a wrong conclusion from an imperfect history, and an exhibition of want of charity and proper conduct to a professional neighbour.

You may think, from your imperfect knowledge, that we "have every reason to leave the verdict undisturbed"; but we have sound facts, good reasons and good opinions for acting otherwise than you advise—always remembering, before so doing, that there is a certainty of our not being able to get any costs out of the plaintiff.

Mr. Wheelhouse was *not* the first surgeon to see the case; he did not see him before the 19th of July last. Dr. Maclagan was the first to see Mr. Balmforth and examine him.

For your advice about the conduct of medical agents I am obliged, whilst I have a right to question the universality of its application; and desire to inform you that any opinion I gave the plaintiff was given after the Accidental Assurance Company had declined to entertain the claim he had made.

I am, Sir, yours respectfully,

Greenheys, Manchester, Aug. 17th, 1872. J. OGDEN FLETCHER.

*** Mr. Fletcher is very angry with us for following the usually very reliable report of *The Times*, which stated distinctly that the "mode of measurement adopted was to put the tape on the 'trochanter' bone, and then pass it down the leg to the ankle"; and also that the verdict was for forty pounds—not shillings. The statement that Mr. Wheelhouse was the first surgeon to see the patient was due to the accidental transposition of a sentence by the printer, which we regret. We maintain our right to comment on this and similar cases.—ED. L.

THE BIRMINGHAM WOMEN'S HOSPITAL AND ITS LADY HOUSE-SURGEON.

To the Editor of THE LANCET.

SIR,—I see in your issue of the 3rd inst. that the committee of the above hospital have elected a "Mrs. Louisa Atkins, M.D. of Zurich," as house-surgeon, in opposition to two eligible gentlemen candidates. Now my only object in asking you to give insertion to this is to call the attention of the committee—and also that of the two gentlemen who were candidates—to the probability of the election being illegal.

On referring to Clauses 36, 37, and 40 of the Medical Act, the following may be read as extracts:—Clause 36. "No person shall hold any appointment as physician, surgeon, or other medical officer," &c., "in any hospital, infirmary, dispensary, or lying-in hospital, *not supported wholly by voluntary contributions*" &c., "unless he be *registered* under this Act." Clause 37 provides that *only* persons who are *registered under the Medical Act* can give *valid* or legal certificates of death, sickness, &c., for insurance societies, &c. Clause 40 provides that anyone using such a title as Doctor of Medicine (i.e., M.D.), or any other title leading the public to believe that he or she is recognised by law as a physician, surgeon, doctor, or other practitioner in medicine or surgery, or branches of these, and is *not* registered under the Medical Act, is liable to prosecution, with a fine of £20 and costs.

Therefore, until the committee are able to prove that the hospital "is supported *wholly* by voluntary contributions," or that Mrs. Louisa Atkins has got her Munich degree registered (she cannot register the M.D. Zurich unless she obtained it in a *bonâ fide* manner before January 1st, 1859), or at least a British qualification in lieu, by the General Medical Council, the appointment is not legal and cannot be lawfully held. It now remains for the interested parties to examine their individual *locus standi*.

Faithfully yours,

Sheffield, August 20th, 1872. JOHN BROOM, L.M.S.M.

ARMY MEDICAL OFFICERS AND LEAVE.

To the Editor of THE LANCET.

SIR,—Before our late principal medical officer, an Inspector-General of Hospitals, left Malta, a reduction of the medical establishment took place, whether by his recommendation or not I do not know; but he refused "all leave to medical officers," and his successor, a surgeon-major sent out from England to assume medical charge of the station, is rigorously carrying out his instructions. Just a glance at the Army List will show that there were already two officers on the strength of the command of the same grade as the *in commendam* surgeon-major. Coincident with or rapidly succeeding this reduction of establishment is a great amount of sickness amongst the medical officers. Two regimental surgeons have been sent home on sick-leave, one surgeon-major and two assistant-surgeons are on the sick-list, and as we are now in the middle of our hot season, the work falls heavy on those who are left to perform it. At home medical officers are so harassed and often impoverished by incessant change of station as to make them almost glad to go abroad to avoid the discomfort. Here they are treated differently from other officers. Every officer in the service is entitled to leave in accordance with existing regulations and usage. It is not, therefore, the spirit of the regulations to deprive the medical officer of this boon. Why, then, is he treated in this respect with less consideration than others? If there were anything unusual to cause pressure or "exigency of the service," the privation would not form a ground for complaint. It is a serious and long-standing grievance. No class of men, I believe, perform their duties more conscientiously than the medical officer, and no other officer so urgently requires an occasional relief from his duties. I ask you, therefore, in the interest of the service, whether it is either just or politic to withhold from him that which is freely conceded to others?

If a new order of things is to be introduced, by which

more work is expected and no more pay, I trust you will agree with me that it is not right to expect it from men who now serve nearly fifteen years before they get their first step of promotion.

I have the honour to enclose my card, and in place of my name will subscribe the motto

QUI SE SERT DE LA LAMPE AU MOINS
DE L'HUILE Y MET.

Malta, July 30th, 1872.

PUERPERAL CONVULSIONS TREATED BY CHLOROFORM.

To the Editor of THE LANCET.

SIR,—Some months ago Dr. Wiltshire recorded a case of puerperal convulsions successfully treated by chloroform; and I think the following case, in which such treatment was inapplicable, on account of the frequency of the convulsions and the length of the attack, may be interesting to your readers:—

S. M., aged twenty years, unmarried, in the sixth month of pregnancy, after suffering for a day or two from great depression of spirits, was suddenly seized with violent stabbing pain in the right breast. I saw her at 1.30 A.M., Sept. 12th, 1870. Patient flushed and feverish; breast swollen, hard, and painful; ordered poultices to breast, and gave febrifuge with opium.—1 P.M.: Much better; fever reduced considerably; breast still painful, though much relieved; suffering from griping pains in bowels. On examination, os uteri quite closed and firm.—5 P.M.: Sent for; found patient in convulsions, recurring every twenty or thirty minutes; the whole body violently convulsed. Chloroform relieved the spasms, but did not increase the interval, nor in any way affect the recurrence of the fits; the os uteri still closed. At 1 A.M., on consultation by note with my partner, Dr. Webb, I decided to induce labour. Gradually dilating the os by passing the finger within it, I punctured the membranes with a stylet, and, action of the uterus commencing, a dead fœtus was born in about seven hours. The convulsions entirely ceased after the liquor amnii was evacuated. Patient was insensible for several hours, but made a rapid recovery, only retarded by the abscess forming in the breast.

I am, Sir, yours obediently,

Wirksworth, Aug. 13th, 1872. WM. MILLIGAN.

ELECTRIC FORCEPS.

To the Editor of THE LANCET.

SIR,—My attention has been called by Messrs. Evans and Wormald, the makers of my "Electric probe and forceps," to a letter in your journal on August 10, signed by Dr. Taylor, who claims to be the inventor of the application of electricity for the extraction of bullets from gunshot wounds.

You will, I am sure, in justice allow me also to state my claims to be the inventor. The idea was suggested by the case of Garibaldi; and my first instrument was constructed for the purpose of extracting the bullet which he received in his foot at Aspromonte. It was not, however, used owing to the delay which was incurred in endeavouring to obtain an introduction to the proper quarter; the bullet being in the meantime extracted by Dr. Nélaton.

Beyond sending a description to the *Daily Telegraph*, in the hope of arousing interest in the invention, nothing further was done until 1866, when I introduced it to the notice of the Director-General of the Army Medical Department, Dr. Logan, who immediately appreciated the idea; and it was shortly after reported upon by Professor Longmore, of Netley. The latter being well acquainted with the invention, I do not understand how he should ascribe it to a German (as stated in Dr. Taylor's letter), unless he has distinct record prior to the affair of Garibaldi. It is possible he may have been misled by one of a number of my instruments, which were sent out to Berlin in anticipation of the war with France, and which had the instructions inside printed in German.

I remain, Sir, your obedient servant,

Belsize-road, N.W., Aug. 1872. S. DE WILDE.

WATKINS VERSUS MEERES.

To the Editor of THE LANCET.

SIR,—The above is one of those cases unfortunately of too frequent occurrence, in which the directly conflicting medical evidence reflects so much discredit upon our art. The treatment pursued, as testified to by several highly respectable medical men, seems to have been quite correct and proper; and the judge decided that no blame could be attached to Mr. Meeres. That any medical man should in this case have allowed himself to appear in the witness-box and swear that the treatment was "quite wrong," was most unjust and inexcusable; and that a man of Mr. Gore's age and position should have done so is much to be regretted. If medical men would only show a little more *esprit de corps*, and be less eager and reckless in casting reflections upon the practice of their professional brethren, these vexatious actions would become much less frequent, and our profession gain greatly in esteem and respect. I have always made it a rule to abstain from expressing any opinion of the treatment pursued by any gentleman who may have preceded me in the management of a case, on the ground that, as I was not present at the time, and consequently not acquainted with all the circumstances, I could not say what might or might not have been necessary; and I think that we cannot possibly be too careful in this respect.

I am, Sir, yours faithfully,

Leeds, Aug. 18th, 1872. PHILIP FOSTER.

AGE OF PATIENTS IN NOTES OF CASES.

To the Editor of THE LANCET.

SIR,—It is a great pity that in many of the most instructive cases reported in your columns weekly the age of the patient should be omitted to be stated. In all cases, both medical and surgical, the age and sex of the patient should be mentioned. When one hears of some diseases almost the first question one asks is the age of the patient. In your number for August 3rd, 1872, are the notes of two interesting cases, one of "Cancrum Oris, after Broncho-Pneumonia," the other "Colotomy for Stricture of the Rectum," but in neither of them is the age of the patient given; and on this account no small amount of interest that would otherwise be taken in reading such cases is lost, for in both the age is of importance.

Some of your readers, also, that may be collecting notes of cases for statistical purposes are thus debarred from making them so complete as they could wish.

Trusting I may have drawn attention to an omission which has not escaped the notice of others,

Believe me to remain yours faithfully,

J. LACY MORLEY, M.R.C.S.,
Late Lieut. 20th Regiment.

Guy's Hospital, August, 1872.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—I appeal through THE LANCET to the profession on behalf of a medical man personally well known to me, whose health and circumstances are in a very deplorable condition. For many months this gentleman has been the subject of liver disease and dropsy, and quite unable to attend to his duties; he has consequently lost a public appointment, and his practice has dwindled down to almost nothing; he lies in a most precarious state, his wife and three children are in great distress, taxes are due, distraint is threatened, and help must be got from some quarter. I hope those who can afford to do so will send a small sum of money. I would willingly act as receiver, but to avoid any suspicion of a second Carden case, it would be better to send donations to THE LANCET Office, if you, Mr. Editor, will consent to receive them.

I am, Sir, yours truly,

DANIEL HOOPER, B.A., M.B.,
Physician to the Surrey Dispensary.

Trinity-square, August 17th, 1872.

IRELAND.

(From our own Correspondent.)

SIR ARTHUR GUINNESS has generously contributed the munificent sum of £250 to the fund for completing the front and the "Guinness wing" of the new Coombe Lying-in Hospital in this city. It has been called the "Guinness Wing" from Sir Arthur's father, the late Sir Benjamin Guinness having, during his lifetime, taken great interest in this most excellent charity, and having given £2000 towards the building of the wing that bears his name.

At a meeting of the Public Health Committee of Kingstown township last week, a report from Dr. Cameron, the city analyst, was read, concerning a sample of pump water submitted to him for analysis by the dairyman of the locality, who requested that a pump lately closed by the committee should be reopened. The analysis showed that there were impurities of an animal source present, but that the worst feature was the enormous quantity of sulphate of lime—viz., 53 grains to the gallon. The committee accordingly refused to comply with the request of the petitioners, since it was fully proved that the use of the water was dangerous to the public health.

Mr. Wheeler has been appointed surgeon to the City of Dublin Hospital, in the place of Mr. Hargrave, who has resigned. Mr. Hargrave has been attached to this hospital for a considerable number of years, but his health has been so impaired by an attack of apoplexy as to cause his retirement. I am not aware how much was paid in this instance for the post of surgeon, but its market value is generally considered in medical circles to be worth close on £1000.

The usual quarterly meeting of the Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland was held in Belfast on the 7th inst. The president, Dr. T. H. Purdon, stated that he had attended the annual meeting of the parent society in Dublin in June last, which was large and influential. Among the resolutions passed at that meeting was one to the effect that the thanks of the Society be given to the medical students of Belfast for their generous contributions to its funds. The total sum at the command of the Society for distribution this year was between £800 and £900, which enabled assistance to be given to seventy-seven applicants, in sums varying from £5 to £26 each recipient. The committee earnestly hoped that those of the profession who had not supported the Society would not longer hold back from doing so, an experience of thirty years having amply proved its inestimable value to necessitous professional brethren, their widows and orphans.

A splendid collection of tigers, bears, hyænas, deer, adjutants, herons, &c., procured by the late Earl of Mayo for presentation to the Zoological Society of Dublin, has just arrived in this city, and been handed over to the officials of that Society. Lord Mayo was President of the Zoological Society, and this collection, obtained at a good deal of trouble and expense, shows the lively interest the lamented nobleman took in obtaining specimens of natural history suitable for this climate.

Dublin, 20th August, 1872.

PARIS.

(From our Special Correspondent.)

THE DEBATES ON THORACENTESIS AT THE PARIS ACADEMY OF MEDICINE.

IT may be well, now that the discussion on empyema and thoracentesis is drawing to a close at the Academy of Medicine, to sum up the main features of the debates in a few lines. As usual with such discussions at the Academy, the orators seemed at first to be far more preoccupied with the desire of bringing out their oratorical abilities, and giving hard hits to their respective adversaries, than with the thought of elucidating the question by stating the facts of their personal experience in a concise, plain, and practical manner. After much confusion, however, some light is beginning to dawn, and a few facts stand out prominently, amidst a deluge of talk, which may be gathered for practical purposes. The five great methods of performing thoracentesis which were subjected to discussion, and warmly advocated by their respective partisans (each bringing forward a mass of cases and arguments to justify his preference, thus causing considerable confusion in the minds of the listeners), were the following: Puncture with Reybard's canula; subcutaneous puncture, as advocated by M. Jules Guérin; drainage (Chassaignac); incision; aspiration by means of certain apparatus in which a vacuum is previously established.

M. Richet, I think, has so well pointed out the merits and demerits of these various systems that I cannot do better than quote the principal outlines of the discourse, by which he, so to say, wound up the whole discussion on the matter a few days ago.

M. Richet lays down as a starting-point that the presence of pus in the pleura is like an abscess, the walls of which are retractile. He prefers to employ the aspirating syringe of Jules Guérin, which permits the gradual retraction of the pyogenic membrane, rather than the new aspirators, which act roughly, and tend to tear the walls of the pleural sac without permitting its gradual retraction. They are especially dangerous in cases of fistulæ, as they cause the entrance of air into the pleura through the vacuum which they cause. The incision is useful in cases where there exist folds of false membrane, but it does not stop the secretion of pus; on the contrary, it favours the process through the contact of air. For preventing the formation of pus, drainage is the proper thing, as it gradually stops the purulent secretions by permitting daily washings. The combination of incision and drainage he therefore advocates in all grave cases.

THE SANITARY CONDITION OF PARIS.

The week before last (namely, from the 3rd to the 10th of August), the bulletin published by the municipal authorities of this city mentioned, for the above period of time, as many as 854 deaths, out of which there were 73 cases of cholerine in children, and 11 of sporadic cholera. Some alarm was consequently entertained as to the possible approach or existence of a choleraic epidemic, and M. Jules Guérin expressed these fears at a public meeting of the Academy of Medicine. He was, however, answered by Baron Larrey, who mentioned that the Council of Health had immediately caused an inquiry to be made into the real character of these cases, which proved to be simply sporadic cholera. He had himself, he added, investigated one case which had occurred in the quarter of Greville, and found it to be one of protracted diarrhœa, during which the patient had committed all kinds of excesses. This favourable view touching the present health of Paris was borne out by the following bulletin of the municipality, which for last week (10th to 17th August) announces only 725 deaths, with but 27 cases of infantile cholerine, and 5 of cholera nostras. The sanitary condition of Paris may therefore be safely asserted to be as good now as it always is at this season of the year, when the use of unripe or over-ripe fruit, excess in water or spirit drinking, &c., invariably bring on more or less varied disorders of the digestive organs.

THE FORTHCOMING MEDICAL CONGRESS OF LYONS.

The Medical Congress of Lyons will open on the 18th of September next. It may be well to give the list of the various questions which will be brought forward for discussion:—1. Epidemics. 2. Gunshot wounds. 3. Ambulances in time of war. 4. Cowpest. 5. Causes of the depopulation of France, and means for preventing it. 6. Treatment of syphilis. 7. Reorganisation of the teaching of medicine and pharmacy. 8. Practical means for bettering the situation of medical men, and bringing it into harmony with the importance of the part which they are called upon to play in society. Evidently, the questions have been well chosen, are of general importance, and, if practically discussed, will give great scientific interest to the meeting.

This is the first time, I think, that matters of professional interest will be discussed in a French medical congress, and the timely character of this innovation seems to be highly appreciated, as the National Assembly is about to discuss and decide upon various questions of paramount

importance touching the organisation of medical education in France, the institution of new faculties of medicine, the organisation of medical assistance in the country districts, &c. No doubt the debates at the Congress of Lyons will be of great value in elucidating many vexed points connected with these subjects, and in showing to the Assembly what are the newest and more general views entertained on such matters by the profession itself.

The Congress bids fair to be a successful one; besides numerous French and foreign members who have sent in their adhesion, about two hundred names are already enrolled as visitors. The great industrial and art exhibition now going on at Lyons will certainly be an immense attraction for visitors. Besides the above inducements, there is another great one—last, not least—which well deserves to be mentioned. The Executive Commission, taking example, doubtless, from the proceedings of the British Medical Association, has organised two excursions or pleasure trips to neighbouring places of interest. Bourg-en-Bresse, with the marvellous art treasury of its church, the beautiful forest of Seillon, its ceramic manufactures and collections, and its old buildings, will be the first to be visited. The Committee, it is said, has not forgotten that if that part of the country has given birth to the illustrious Bichat, it has also the honour of numbering among its worthies no less a personage than the great Brillat-Savarin, of world-wide culinary renown, so that the good things of life, eatable and potable, will be provided for the excursionists. Indeed, there seems to be a universal desire among our good *confrères* of Lyons and its environs, to make up by a large individual and collective hospitality for the more than frigid reception which was given to the strangers who visited the International Congress of Paris in 1869, and who departed from this city with the unshakable conviction that a few good dinners and "jolly" gatherings would have been only due compensation for the very long and empty speeches which wearied them to death in the large amphitheatre of the Paris School of Medicine.

THE NEW HÔTEL DIEU.

The question of the new Hôtel Dieu is still in suspense before the Municipal Council of Paris. The municipal worthies are in the greatest perplexity. They are fully alive to the insalubrity of the huge edifice designed and half built up by the Empire, and yet they are at a loss to know how to utilise it in some other manner, so as not to lose the many millions of money which have already disappeared in erecting it. Neither the Préfecture of the Seine nor the Préfecture of Police seems inclined to transfer its bureau to this new locality. Two of the members have proposed to sell the Hôtel Dieu to a Dock Company, and with the three or four millions thus realised to establish elsewhere, and in fragments, the 800 beds which the new Hôtel Dieu was intended to contain. Thus the old Hôtel Dieu would be arranged so as to contain 200 beds instead of its present number, whilst various *octroi* barracks, situate along the external boulevards and fortifications of the town, and which are now empty, would be altered so as to give accommodation to 600 other patients. If this scheme be adopted, the system of small hospitals will have been thus inaugurated *de facto* in this country. But *que d'embarras* has been caused by the desire of building a "monumental and commemorative hospital under the shade of Notre Dame."

Paris, August 20th, 1872.

Obituary.

FREDERIC CARPENTER SKEY, C.B., F.R.S., &c.

ONE by one the connecting links between the older generation and the new are passing away. One of the last has just disappeared in Mr. F. C. Skey, long known to the professional, the scientific, and the social worlds as an able and accomplished surgeon, a painstaking and popular lecturer, and a most upright, public-spirited, and duty-doing citizen.

His education was superior in its preliminary stages to that of the majority of his young contemporaries; part of it being carried on at the then famous University of Edinburgh, where he spent two years. Well equipped from the philosophic and scientific class-rooms, he came back to London to article himself as a pupil to John Abernethy, then at the zenith of his reputation as surgeon to St. Bartholomew's. That event, a critical one in his career, took place on the 15th of April, 1816, at the Royal College of Surgeons, on payment of the customary premium of five hundred guineas. At the close of an industrious and well-employed career at the hospital he took the diploma of the Royal College on April 5th, 1822, and, continuing to assist Abernethy in his extensive practice, won the esteem and gratitude of the eccentric and generous surgeon. Among the tokens of his master's favour he received, in 1826, the appointment of Demonstrator of Anatomy at St. Bartholomew's, an advancement which was of course begrudged him by a host of expectant candidates, but which he continued to justify by his punctuality, intelligence, and neatness of hand. Abernethy's death, however, arrested his career at St. Bartholomew's, the anatomical lectures falling to the share of a successor who put in a claim to the emoluments derived by Mr. Skey from his demonstrations. A quarrel ensued; and he, in company with Drs. R. B. Todd, Hope, Marshall Hall, Pereira, and Mr. Kiernan, founded the Aldersgate School of Medicine. Under such lecturers—every one of whom became afterwards distinguished, Mr. Kiernan being the sole survivor—the school developed into one of the largest in London; and for ten years Mr. Skey continued to attract large audiences, the bulk of whom were Bartholomew's men, who much preferred him to Lawrence as an expositor of the science and art of surgery. In private practice he acquired a wide and influential *clientèle*, and received, among other marks of public confidence, the post of Surgeon to the Charterhouse. The still greater honour of filling the double appointment of Surgeon and Professor to King's College he declined, because the condition of his accepting the offer was that he should resign the two posts in three years. About the same time he took up his residence in Grosvenor-street, where his practice, already large, multiplied apace. In 1843 he became honorary Fellow of the Royal College of Surgeons, and in 1848 was nominated and returned by the Fellows to a seat in the Council. Two years later he was appointed Hunterian Orator, in which capacity he delivered a most effective harangue, which was widely reproduced and admired at the time. In 1852 his colleagues offered, and he accepted, the post of Professor of Human Anatomy and Surgery, and three days a week he addressed numerous and high-class audiences. In 1853 he became a member of the Court of Examiners, and earned and maintained a consistant character for impartiality, penetration, and discernment. As a reward for his great services to the College he obtained the highest honour in the power of his colleagues to bestow—the presidency of the institution. Twenty years before he had been invited to return to his old school, St. Bartholomew's, as Lecturer on Anatomy, with Mr. (afterwards Sir William) Lawrence as his colleague in the Chair of Surgery, and Mr. (now Sir James) Paget in that of Physiology. For well-nigh a quarter of a century did he retain the post and fulfil the duties of assistant-surgeon; his appointment as full surgeon came late, and after nine years' occupancy he resigned it, when in his 66th year. With all the cares, anxieties, and, let us add, the disappointments of professional life, he took the keenest interest in State hygiene; was elected Chairman at the Admiralty of the first committee for the prevention of contagious diseases in the Army and Navy, and was mainly instrumental in drawing up the famous Acts which have since met with so much fanatical and, unhappily, successful opposition. In acknowledgment of his services in this undertaking he received the honour of C.B.

To the scientific part of the profession he is known for his valuable papers on various departments of surgical research. Before the Royal Society, of which he subsequently became a fellow, he read a paper on "Muscular Fibre," which was published in the Transactions of that body. He published an excellent manual of "Operative Surgery"—a standard work for the student,—besides treatises on more special subjects, such as "Treatment of Chronic Ulcers by Opium"; "Venereal Diseases"; and lectures on the "Relative Merits of the two Operations for Stone"; and on "Hysteria,"—the last publication reaching a third edition. In general journalism he occasionally joined with

vigour and effect. His letters in *The Times* on over-training, especially in connexion with the inter-university boat-race; on the diseases due to alcohol, and so forth, attracted much attention, and provoked no little controversy at the time. Whatever may be thought of his theses, there is no doubt that he contributed most materially to the solution of questions of long-standing and large interest.

His health had for months past been feeble, the cause being ulceration of the intestines, which had formed the subject of one of his best treatises. The pain he endured was often severe, but he sustained it with the fortitude characteristic of his whole bearing through life. He died at his residence in Mount-street, Grosvenor-square, on the 15th instant, at the ripe age of seventy-two, leaving not many behind him who with equal energy and decision of character combine so much genuine kindness of heart and disinterested love of the profession.

HUGH CARMICHAEL, F.R.C.S.I.

A CADET of the ancient but now extinct house of Hyndford, whose estates were chiefly in Lanarkshire, and included the parish which bore the family name of Carmichael, this gentleman was nearly related to the late Sir Robert Carmichael, M.D., of Dublin, where he was born towards the close of last century. He received an excellent education, the preliminary or non-medical part of which concluded by his graduation as Master of Arts at Trinity College, Dublin. In 1812 he became Licentiate of the Royal College of Surgeons, and eight years later was elected Fellow of the same body. He served, we believe, for some time, and with distinction, in the army, and thereafter settled in Dublin, where a large and influential practice awaited him. A general favourite in the society of the Irish capital, and a busy and variously employed practitioner, he yet found time to contribute with originality and effect to the literature of the profession, and wrote an "Essay on Turpentine in Venereal Iritis," besides contributing to the *Dublin Journal* on the "Efficiency of Pressure in the Arrest and Cure of Venereal Phagedænic Ulceration," on the "Position of the Placenta in the Womb during Gestation," on the "Purulent Ophthalmia of Infants," and so forth—all his writings being characterised by much strength of reasoning and power of expression. He died at his house, in Lower Pembroke-street, Dublin, on the 6th ult., and was followed to the grave by a large retinue of mourners. One of his daughters is married to Mr. Clark Aspinall, Recorder of Liverpool, and the other to Mr. Sidney Laman Blanchard, barrister-at-law, and well known in literary circles as a brilliant and versatile man of letters.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 15th inst.:—

Harnett, Alfred, Bitterne, Southampton.
Little, Robert, Dublin.
Wagstaff, Thomas Henry, Camberwell.

On the same day the following gentlemen passed their First Professional Examination:—

Geo. Weddall Bond, Guy's Hospital; Wm. Harrison Coates, St. Thomas's Hospital; Henry Cornelius Cole, University College; Robert Turner Hales, St. Bartholomew's Hospital.

INDIAN MEDICAL SERVICE.—The following is a list of candidates who were successful at the competitive examinations held at London in February and at Netley in August, 1872, after having passed through a course at the Army Medical School, Netley:—

	Marks.
*Crombie, A., Edinburgh	6215
†Murphy, W. R., Dublin	5825
Joubert, C. H., London	5540
Russell, E. G., London	5360
Scully, J., London	5325
Branfoot, A. M., London	5190
Hall, G. C., London	4985
Roy, G. Ch., Glasgow and Calcutta ...	4790
Reid, A. S., Edinburgh	4670
Watson, G., Edinburgh	4595
Fasken, W. A. D., London	4394
Lawrie, E., Edinburgh and Paris	4260
Wilson, J., Cork	4250
M'Nally, C. J., Dublin	4222
Lang, J. A. T., London	4196
Mulvany, E., Dublin	4195
Zorab, J. M., Calcutta and Edinburgh ...	4187
Dutt, R. L., Calcutta, London, and Aberdeen	4145
Daphtary, G. R., Bombay and Glasgow ...	4075
Bookey, J. T. B., Dublin	4036
Butler, W. J., London	4016
M'Gregor, A., London	4015
Young, J., Edinburgh	3955
Duke, J., London	3912
Gupta, B., Calcutta and Glasgow	3877
M'Conaghey, J., Galway, Belfast, and Dub.	3856
Palmer, E., Galway and Dublin	3840
Williams, A. H., Aberdeen and London ...	3715
Holmes, R. A. K., Dublin and Belfast ...	3650
Ferris, J. E. C., London	3613
Lombard, D. E. T., Dublin and Cork ...	3555
Johnson, W. E., Dublin and Belfast ...	3522
Aylen, T. V., London...	3494
Dobie, S. L., London...	3451
Bevan, G. F., Dublin...	3372
Lloyd, C., Cork	3350
Dobson, A. F., Dublin	3345
Little, C., Belfast and Dublin	3221
Mayne, T., London	2939
Lawrenson, D. E. T., Dublin	2935

* Awarded the Herbert Prize, Aug. 1871.
† Awarded the Herbert Prize, Aug. 1872.

A SERIOUS disease is said to have appeared among deer in the royal parks.

THE Adelaide Hospital, Dublin, has received £375 under the will of Dr. Ryan. The Great Northern Hospital, Caledonian-road, has received £100 from "Smith."

CHARING-CROSS HOSPITAL.—The election of an assistant-surgeon to the vacancy occasioned by the promotion of Mr. Barwell to full surgeon will not be held until October, in consequence of so many persons being out of town.

THE LICENSING ACT.—The carrying out of this measure appears to be meeting with considerable opposition in various parts of the country. In Exeter, street disturbances have ensued. In Maidstone the enforcement of the Act excited great dissatisfaction, which at one time assumed the form of violence. In Portsmouth and Leicester also there has been exhibited a want of cordiality towards the new law.

THE number of foreign animals brought by sea to ports in Great Britain, which on inspection on landing, within the month of July, were found to be affected with contagious or infectious disease, was 346. Of these 326 were suffering from foot-and-mouth disease, 12 from sheep scab, and 8 from cattle plague. The whole, with the exception of three, which died on landing, were slaughtered. They comprised 168 head of cattle, 172 sheep, and 6 pigs.

A CURIOUS but by no means unusual lawsuit was lately decided in France. A surgeon extracted a piece of cartilaginous meat from the trachea of a lady, and charged her £20 for the operation. The lady considered the amount excessive, and said that Nélaton himself would not have asked such a sum. Dr. Nélaton was then appealed to, and said that, taking into consideration the position of the lady, the charge was moderate. Ultimately a jury awarded the surgeon £12.

Medical Appointments.

ARMSTRONG, Dr. (of Johnstone), has been appointed Medical Officer and Public Vaccinator for the Parish of Tarbolton, Ayrshire, vice D. Munro, L.R.C.P.Ed., L.F.P. & S. Glas., resigned.

BARTON, J. E., M.R.C.S.E., has been appointed House-Surgeon to the Westminster Hospital, vice R. S. Hannay, M.R.C.S.E., resigned.

BRUNTON, W. R., M.R.C.S.E., has been appointed Medical Officer of Health to the Local Board of Health and Borough of Tamworth.

CONOLLY, S. FULLOM, M.R.C.S.E., has been appointed Junior House-Surgeon to the Bradford Infirmary and Dispensary.

DRAKIE, C. W. S., M.R.C.S.E., has been appointed Resident Medical Officer for the Lock Wards of the Royal Portsmouth, Portsea, and Gosport Hospital, vice P. D. Hopgood, M.R.C.S.E., L.M., resigned.

ELWIN, J. FOUNTAIN, F.R.C.S.E., L.S.A.L., has been appointed Medical Superintendent to the Bristol Medical Mission.

GRANT, J., M.D., has been elected Medical Officer and Public Vaccinator for the Parishes of Cromdale and Duthil, vice Chas. Adam, M.B., C.M., resigned.

HACKNEY, A. H., M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for District No. 4 of the Battle Union, Sussex, vice Gillies Calder, M.R.C.S.E., deceased.

HICKMAN, R., M.R.C.S.E., has been appointed a House-Surgeon to St. Mary's Hospital, vice E. J. Parrott, L.R.C.P.L., M.R.C.S.E.

HUNTER, Mr. G. Y., has been appointed Surgeon to Sir Jamsetjee Jejeebhoy's Hospital at Bombay, Professor of Anatomy in the Grant Medical Schools, and Curator of the Museum.

IMLACH, F., M.B., M.R.C.S.E., has been appointed House-Surgeon to the Liverpool Ladies' Charity and Lying-in Hospital, vice R. A. H. Wood, M.R.C.S.E., appointed Hon. Medical Officer to the South Dispensary.

JAMES, J. R., M.B., M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Llansantffraid District and the Workhouse of the Aberayron Union, Cardiganshire, vice J. James, M.R.C.S.E., deceased.

LITTLE, W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Surgeon to the Girls' Industrial School, Toxteth-park, Liverpool, vice B. Barrett, M.D., M.R.S.S.E., deceased.

LLOYD, R. H., M.R.C.S.E., has been appointed Resident Medical Officer to the Lambeth Workhouse, vice C. L. Parr, L.R.C.P.Ed., M.R.C.S.E., resigned.

LUSH, W. V., M.D., of Weymouth, has been appointed Physician to the Dorset County Hospital, Dorchester, vice D. W. Williams, M.D., resigned.

MAC QUIBBAN, C. M., M.B., L.R.C.S.Ed., has been appointed Medical Officer to the Northern Friendly Society, Aberdeen, vice J. G. Smith, M.D., M.R.C.S.E., deceased.

MANISTY, F. S., M.R.C.S.E., has been appointed Medical Officer for District No. 3 of the Hawarden Union, Flintshire.

NUNAN, F., M.D., L.R.C.S.Ed., L.M., has been elected Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Blarney Dispensary District of the Cork Union, vice J. G. Punch, L.K.Q.C.P.I., M.R.C.S.E., deceased.

PARROTT, E. J., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Hayes District of the Uxbridge Union, vice F. W. Isherwood, M.D., deceased.

PATERSON, D., L.R.C.S.Ed., has been appointed Medical Officer to the Female Orphan Asylum, Myrtle-street, Liverpool.

PERCY, G., L.K.Q.C.P.I., M.R.C.S.E., has been elected Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ballybay Dispensary District of the Castleblayney Union, Co. Monaghan, vice L. Joyce, M.R.C.S.E., resigned.

PRATT, W., M.D., L.R.C.P.L., has been appointed Medical Officer and Public Vaccinator for the Newtown District of the Newtown and Llanidloes Union, Montgomeryshire, vice R. Jones, M.D., F.R.C.S.E., deceased.

ROBINSON, H. S., M.R.C.S.E., has been appointed Assistant-Surgeon to the Norfolk and Norwich Eye Infirmary.

STEELE, S. T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Halifax Infirmary and Dispensary.

THOMAS, W., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the District of Hebden-bridge, Yorkshire, vice J. Thomas, M.R.C.S.E., deceased.

THOMPSON, T. J., L.R.C.P.Ed., has been appointed Medical Officer to the Beverley Union Workhouse, vice W. H. Stretton, M.R.C.S.E., L.M., resigned.

WADDY, H. E., L.R.C.P.L., M.R.C.S.E., has been appointed Assistant-Surgeon to the Gloucester Infirmary, vice W. F. Keddell, M.R.C.S.E., resigned.

WILLIAMS, H., M.R.C.S.E., has been appointed Resident House-Surgeon to the Blackburn and East Lancashire Infirmary, vice J. Maunsell, M.D., L.R.C.S.Ed., resigned from failing health.

WOODS, W., L.K.Q.C.P.I., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Attendant to the Royal Irish Constabulary, Monaghan, vice W. Temple, M.D., deceased.

Births, Marriages, and Deaths.

BIRTHS.

CRANE.—On the 17th inst., at Hallaton, Uppingham, the wife of Charles A. Crane, M.D., of a daughter.

EASTWOOD.—On the 18th inst., at Dinsdale-park, Darlington, the wife of J. W. Eastwood, M.D., M.R.C.P.L., of a son.

GALTON.—On the 18th inst., at Thicket-road, Anerley, the wife of John H. Galton, M.D., of a daughter.

KERBEY.—On the 12th inst., at Weobley, Herefordshire, the wife of W. H. Kerbey, M.R.C.S.E., of a daughter.

LONG.—On the 20th inst., at Richmond-road, Dalston, the wife of Mark Long, M.D., of a son.

RAWSON.—On the 4th inst., at West House, Thornton, Bradford, the wife of Edwin Elsworth Rawson, L.R.C.P.Ed., M.R.C.S.E., of a son.

MARRIAGES.

COGAN—BUXTON.—On the 20th inst., at Northampton, Lee Fyson Cogan, M.R.C.S.E., L.R.C.P.Ed., to Isabel Anne, youngest daughter of George Buxton, Esq., J.P. of Northampton.

SECCOMBE—BATES.—On the 14th inst., at Terrington St. Clement's, John T. Seccombe, M.D., to Helen, daughter of Henry Bates, Esq.

SKARDON—CHESTER.—On the 10th inst., at St. Mark's, Sheffield, Thomas Gray Skardon, M.R.C.S.E., to Ann Heanley, daughter of the late John Chester, Esq.

DEATHS.

BELLAMY.—On the 16th inst., P. F. Bellamy, M.R.C.S.E., of Plymouth, aged 68.

COURTENAY.—On the 21st inst., at Globe-street, Wapping, H. Bisshopp Courtenay, L.F.P. & S. Glas.

FURNISS.—On the 18th inst., J. J. Furniss, L.K.Q.C.P.I., L.R.C.S.I., aged 26.

JEYES.—On the 15th inst., at Leamington, Dr. S. Jeyes, late of the 15th Hussars.

SUMMERS.—On the 13th inst., at North Petherton, Somerset, W. A. Summers, M.R.C.S.E., aged 36.

TURNER.—On the 15th inst., at Lower Sydenham, E. F. Turner, M.B., late of Market Bosworth, aged 30.

WINSTANLEY.—On the 17th inst., R. Winstanley, M.R.C.S.E., late of Wigan, aged 30.

Medical Diary of the Week.

Monday, Aug. 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Aug. 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Aug. 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 3 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Aug. 29.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 3 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 3 P.M.

Friday, Aug. 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 3 P.M.

Saturday, Aug. 31.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

SAVING OF LIFE FROM SHIPWRECK.

A REPORT of some interest has just been issued by a Committee appointed by the Admiralty to inquire into the supply of life-boats to the navy, and the best mode of lowering boats and saving life at sea. With regard to the latter point, the Committee recommend the general retention of the apparatus at present in use, though they speak approvingly of the methods introduced respectively by Mr. Clifford and Captain Kynaston. As to life-boats, it is suggested that an improved vessel of the kind be added to the existing establishments. In the matter of life-buoys, the need for improvement on those commonly employed is pointed out; the service cork life-belts being mentioned as sufficient for ordinary occasions, while cork mattresses would be required only in extraordinary emergencies.

P. Q. R.—We believe that surgeons are wanted at the present time to take medical charge of ships conveying coolies from Calcutta to the West Indies. Application should be made to the Emigration Office, 8, Park-street, Westminster.

H. H. H. should consult a medical practitioner in the matter.

TREATMENT OF IDIOTS.

To the Editor of THE LANCET.

SIR,—Dr. Wilks, in his Address in Medicine at Birmingham, is, doubtless, right in the main in the remarks he made decrying the support given by the public to special hospitals. In this category, however, he should not have included the "beautiful house and grounds for the care of hopeless, jabbering idiots," for the results of treatment in such places are of a most encouraging character. Galton, in his book on "Hereditary Genius," states that 30 per cent. of idiots and imbeciles put under suitable instruction have been taught to conform to social and moral law, and rendered capable of order, of good feeling, and of working like the third of an average man; while more than 40 per cent. have become capable of the ordinary transactions of life under friendly control, of understanding moral and social abstractions, and of working like two-thirds of a man. Thanks to special hospitals for idiots, their state is not a "hopeless" one.—Yours, &c.,

August, 1872. JUSTICE.

A "WRINKLE" FROM THE RHEIN-GAU.

THE Government at Wiesbaden has started a Medical Commission to examine the schools with their 5000 scholars from a sanitary point of view. The investigation takes in not only school hygiene in general, ventilation, temperature, and so forth, but enters minutely into the bodily condition of the scholars themselves. Their eyesight, for instance, has been inspected by one of von Graefe's disciples, Dr. Schröder, well known in Wiesbaden and elsewhere as a skilful ophthalmic practitioner. The investigations of him and his colleagues have yielded, up to this time, the following results:—Among 115 scholars of the Real-gymnasium, 16 had curvature of the spine—almost 14 per cent.; in the case of 15 scholars, anæmia was found; and in 6 others, chronic affections of various kinds. Every scholar in Prima A has 1311 cubic metres of school-room breathing space; in Prima B, 1098 cubic metres; in Secunda A, 708; in Secunda B, 653; in Tertia, 545—the proportion being carefully graduated according to the respective forms. Other matters referring to ventilation, light, temperature—all equally well regulated—we pass over, to give the results of the eye inspections. Among 222 cases examined, as many as 126, more than half, were found short-sighted. Happily the weaker grades (91) of short-sightedness were the prevailing ones; the strongest grade (½) not occurring at all (though it might have been expected) in the higher classes, but exclusively in the two lower ones. Here also the percentage of myopia (short-sightedness) exceeded proportionally that in the higher classes, where from Secunda A to Prima A an increase of the percentage of the short-sighted occurred (Tertia, 60 per cent.; Unter-Secunda, 55 per cent.; Ober-Secunda, 47 per cent.; Unter-Prima, 56 per cent.; Ober-Prima, 69 per cent.) This frequency of myopia in the two lower classes is explained by the circumstance that in the majority of cases hereditary predisposition to it was proved. In general among the 69 short-sighted scholars, 34 were hereditary cases, or 49 per cent. (nearly half) of the total short-sighted. In the Unter-Secunda and Tertia, hereditary myopia numbered 59 per cent. Among the 126 myopic eyes, 106, or 84 per cent., were normal cases of short sight. The different degrees of weak sight and sharp sight were also ascertained; and the examination by the ophthalmoscope, with all the results which that invaluable instrument yields, completed the eye inspections. The entire investigations, we may mention, were concluded in a comparatively short time, without incommoding either teacher or pupil, and causing no appreciable interruption to school work. The practice of Germany in this, as in so many other things, deserves adoption among ourselves. In pedagogic circles it might with advantage occupy some of the attention given to the true mode of pronouncing Greek and Latin—a subject highly important, no doubt, but surely not more so than the physical and moral well-being of the pupil, and his normal development by the harmonious culture of body and soul.

R. J. A.—Fatal narcotism has been induced by a scruple.

RAILWAY CASES.

To the Editor of THE LANCET.

SIR,—My attention has been called to certain remarks in THE LANCET of this day relative to the case of Chambers *v.* the Midland Railway Company, which was tried at Leeds before Mr. Justice Blackburn and a special jury on August 14th, 1872; Mr. Digby Seymour, Q.C., Mr. Waddy, and Mr. Cave appearing for the plaintiff; Mr. Field, Q.C., and Mr. Wheelhouse for the Company.

You state that "there were six medical witnesses, three on each side; and the reporter adds, 'there was the usual difference between the doctors as to the probability of recovery.'" Now, what are the facts of the case? and I invite you to test them by the shorthand writer's notes taken for the Midland Company.

On the 23rd of November, 1871, Mr. Chambers was in a railway accident on the Midland line. Forty-two passengers were injured. Every one of them was cut or bruised below the knees. Mr. Chambers was attended by Mr. Rutherford of Shipley, and by Mr. Wheelhouse of Leeds, the surgeon of the Company, both of whom admitted that "he had suffered from concussion of the brain." Dr. Burnie, of Bradford, was then called in to attend him. On the 26th of July, 1872, I was asked to go over to the residence of Mr. Chambers, at Shipley, a distance of fifty miles from Sheffield, to consult as to his present condition and future prospects. Before doing so, I wrote to Mr. Wheelhouse, asking him to meet me. He did so, and I met in consultation Mr. Wheelhouse, Mr. Scattergood, and Dr. C. Allbutt, of Leeds, who all attended for the Midland Company; and Mr. Rutherford and Dr. Burnie, the medical attendants of Mr. Chambers. My friend Mr. Wheelhouse, acting for the Company, gave me every information in the most fair and open manner. We had a long and very friendly consultation, and, so far as I know, there was *no difference of opinion*. At the trial evidence was given for the plaintiff by Dr. Burnie, Mr. Rutherford, and myself; for the Company, by Mr. Wheelhouse, Mr. Scattergood, and Dr. C. Allbutt. After Dr. Allbutt had concluded, Mr. Justice Blackburn asked Dr. Allbutt, "Do you agree with Dr. Hall?" Dr. Allbutt said, "In the main I do. I think he has given his evidence very clearly and very fairly." Mr. Field, Q.C., in his address to the jury, said, "When we have gentlemen of the eminence of Dr. J. C. Hall, of Sheffield, and Mr. Wheelhouse, of Leeds, appearing on the one side and on the other, we may be certain, as in this case, to have no marked difference of medical testimony." Mr. Seymour, Q.C., spoke "of the moderation with which the case had been conducted on both sides." The Judge said "there was no material difference in the medical testimony."

Sir, "the real scandal to the profession" is *not* our evidence, but the unfair and garbled report that you have received of it. The "difference" was on the part of the solicitors as to what the Company should pay; there was no "difference of opinion" in the medical men engaged.

One word more, and I have done. Forty-two passengers were injured in this accident. Thanks to Mr. Wheelhouse and the medical men he met, forty of these claims were settled without coming into a court of law. And in the case of Mr. Chambers, I repeat that there was no difference of opinion as to the serious nature of the injury; the difference of opinion was as to the amount he had to be paid. If you had said, "there was (in this case) the usual" agreement "between doctors," and, consequently, the settlement of claims without legal process, I should have agreed with you. "The doctors" save many contentions in these accidents; and as I think few men living have had more experience of railway accidents than myself, if you wish it, I will very gladly communicate to THE LANCET the results of my thirty years' experience. I remain, Sir, yours, &c.,

JOHN CHARLES HALL,
Senior Physician to the Sheffield Public Hospital.

Sheffield, August 17th, 1872.

To the Editor of THE LANCET.

SIR,—It was with no little surprise that I read in THE LANCET of this morning a lament over the renewed scandal of conflicting medical testimony, the case of Chambers *v.* the Midland Railway Company being the instance in question. As one of those concerned in that case, and as one who yields to none in a desire to see medical testimony improved and respected, I venture to assure you that the report upon which your remarks were founded must have been both false and flippant. There was no scandalous opposition of testimony whatever, and the chance of such opposition was carefully guarded against by the medical men on both sides. Dr. Hall, Dr. Burnie, and Dr. Rutherford, who appeared for Chambers, gave their evidence fairly; and I believe they in their turn will say the same of the evidence of Mr. Wheelhouse, Mr. Scattergood, and myself, who visited Mr. Chambers at the request of the Company. We are all here very anxious to avoid anything like partisanship, and such will not, I am sure, be imputed to us in the present case by any competent observer. I believe I am at liberty to say that, at the conclusion of the plaintiff's case, Mr. Field, on behalf of the Company, was so far satisfied with that part of the medical evidence that it was seriously debated whether he should call us into the box at all. Ultimately it was thought better to call us, but not with the intention of rebutting the plaintiff's medical evidence in any important particulars. Mr. Wheelhouse spoke with all respect of the medical evidence on the other side; and it happens that, in answer to Mr. Seymour, I expressed myself as agreeing on the whole with the evidence given on the other side by Dr. Hall. Dr. Rutherford and Dr. Burnie were disposed to think that some organic mischief was present or possible; but they did not press this opinion, nor was it made use of by the plaintiff's counsel. The plaintiff was nervous and hysterical, and the question arose when his recovery was likely to be complete. His own advisers thought he would not be well for twelve months. We admitted that he was in a very depressed and irritable condition; but were disposed to think that, his mind being freed from the anxieties of the trial, comforted by compensation, and recreated by change of air and scene, he would probably recover in three months. We may have been somewhat too sanguine; his own advisers may have been too desponding. In any case I venture to assert that the difference between us was a reasonable difference, and one with which a jury could easily deal.

I am, Sir, faithfully yours,

Leeds, August 17th, 1872. T. CLIFFORD ALLBUTT.

P.S.—I may say that Dr. Rutherford, the plaintiff's attendant, was the first to point out the paragraph to me, and to express his surprise and regret that the reports of the trial should have given so false an impression of it.

To the Editor of THE LANCET.

SIR,—In the "Medical Annotations" of your issue of this week two articles appear, the one of which is so full of misstatements, and the other is so unjust, that I cannot allow them to pass unchallenged. Unfortunately the pressure of assize business in Leeds prevents me doing more than merely enter a protest against the inaccuracies of these two articles this week; and as I know that both Dr. Clifford Allbutt and Dr. Hall have written to you concerning the one headed "Railway Accidents," I will not trouble you with any comments upon that one further than to say that its injustice has been a matter of great pain to those of us who have been concerned in the case of "Chambers against the Midland Railway Company."

For your next week's impression I will send you a really accurate account of the Manchester case; and I feel sure that when that is in the hands of the profession a very different judgment will be formed concerning it to that likely to be arrived at from the perusal of your article of this week.

I am, Sir, yours very truly,

Leeds, August 17th, 1872. C. G. WHEELHOUSE.

*** It is with much pleasure that we give insertion to the above letters from Dr. Allbutt, Mr. Hall, and Mr. Wheelhouse, and we are sincerely glad that our remarks (which were of a general character) were not applicable to the case of Chambers *v.* the Midland Railway Company, in which the difference between the medical witnesses was singularly small. We cannot, however, allow that THE LANCET has been guilty of any misstatements. Our annotation of last week was founded on *The Times* report, of which the following is a *verbatim* copy:—

[COPY.]

"CHAMBERS *v.* THE MIDLAND RAILWAY COMPANY.

"This was an action for personal injuries.

"Mr. Digby Seymour, Q.C., and Mr. Cave were for the plaintiff; Mr. Field, Q.C., and Mr. Wheelhouse for the defendants.

"The plaintiff was an accountant at Leeds, and on the 23rd of November last, as he was travelling from Shipley to Leeds, the train ran into a Lancashire and Yorkshire train near the Midland Station at Leeds. The plaintiff sustained severe injuries, and was attended by Drs. Rutherford, Birney, and Hall. Mr. Wheelhouse, Dr. Allbutt, and Mr. Scattergood were sent by the Company to examine him. He suffered from concussion of the spine, which had produced symptoms of St. Vitus's dance and great hesitation and excitement in speaking.

"There was the usual difference of opinion between the doctors as to the probability of his recovery.

"The jury found a verdict for the plaintiff—Damages, £1500.

"His Lordship stayed the *postea* on payment of £500."

It was from trusting too implicitly in the accuracy of this report that we failed to do justice to the six medical gentlemen engaged on the trial. We accept Mr. Hall's offer.—ED. L.

LIBEL IN AUSTRALIA.

WE have before us a copy of the *Melbourne Argus* for Friday, June 7th, containing the account of an action for libel brought by Mr. Frederick Lloyd, a medical practitioner of Melbourne, against Messrs. Stillwell and Knight, the printers of the *Australian Medical Journal*. It seems that Mr. Lloyd, who was formerly the editor of the now defunct (Australian) *Medical Gazette*, had been put upon a Commission for the purpose of inquiring into the causes and progress of an epidemic of diphtheria, which has lately raged in Melbourne. The *Medical Journal*, in criticising the said Commission, had uttered the alleged libel. In the article complained of, the Commission was spoken of as a "burlesque upon Commissions," and the plaintiff, though not actually named, had been characterised as a drifting waif. One member of the Commission is singled out for eulogy, and the article goes on to say that "it argues either great ignorance or great indelicacy on the part of the Government to have placed Dr. Lloyd on the same Commission" with this gentleman. Speaking of the plaintiff and two others, it says, "We have three preposterous tailors of the Tooley-street of medicine; a Board bursting with confident ignorance," &c. The article concludes thus:—

"We shall look with considerable interest for the report of the Diphtheria Commission, not for the sake of any information it may furnish us withal, but because it will serve as a record of that ambitious incapacity which is known to distinguish certain ill-furnished pretenders to science, of whom our profession has but too many examples."

The case was ably argued on both sides, and the Judge, in summing-up, said:—

"A journal like the *Medical Journal* was, in duty to its subscribers and the public, bound to take cognisance of such appointments as that of the Diphtheria Commission and comment upon them, but of course in a fair and moderate spirit. The article was an attack rather upon the Board than upon individuals, and some latitude must be allowed in discussing such topics. Of course an article must not be made the vehicle of personal spite or malice, even if the occasion justified a comment upon a public man. It was for the jury to say whether the language of this article exceeded the bounds of moderation.

"The jury retired, but were unable to agree upon a verdict, and, having been locked up six hours, were discharged."

F.R.C.S.—We are not to be suspected of any undue disposition to whitewash the College of Physicians; but we must say that we believe the particular allegation made against them by our correspondent to be essentially unjust and incorrect.

Mr. G. R. Gilruth's MS. has been received.

DR. MAUDSLEY ON PSYCHOLOGICAL MEDICINE.

To the Editor of THE LANCET.

SIR,—The presidential addresses delivered at the opening of the British Medical Association, as reported in THE LANCET of August 10th, were all noteworthy. But I think the address of Dr. Maudsley on Psychological Medicine, not merely from the nature of the subject, but the manner in which it was treated, peculiarly fitted for assuming a permanent shape. I think if it were published in a separate form, it would recommend itself to a large class of readers both professional and non-professional. It gives an able synopsis of the present state of the science which it professes to treat, and exhibits very clearly the relation between this and the past state of knowledge on the subject. Moreover, the style is popular as well as scientific. I would therefore rejoice to see it reprinted.—I am, &c.,

August, 1872. J. M.

QUESTION OF PRECEDENCE BETWEEN M.D.s.

Omega asks whether the M.D. Oxon. takes precedence and is higher in a medical point of view than the M.D. Lond. There is no right of precedence among doctors of medicine. Etiquette properly recognises no distinction between M.D. Oxon. and M.D. Lond.

S. A. P.—How came C. D. to attend A. B.'s case? A reply to this question is necessary fully to answer our correspondent's question. If only in an emergency, A. B. should have the fee.

Medicus.—If the master distinctly sent for his surgeon, the groom is not responsible, but the master. Our correspondent is the best judge of the time and trouble involved in the case, and therefore of the charge proper to be made.

THE EAST INDIES.

To the Editor of THE LANCET.

SIR,—I should feel much obliged if any of your readers could refer me to any books on the maladies and climate of the East Indies that might prove of service to me in a six months' tour I am contemplating in that country. I presume that some small work containing hints as to clothing, habits, and what to avoid doing, must have been published by some one.

Yours faithfully,

Reay Forest, Lairg, Sutherland, Aug. 16th, 1872. F. G.

J. O. B.—No; the M.D. or M.B. or M.R.C.P. or F.R.C.P. is not entitled to announce himself as "Surgeon" on his door-plate, unless he possesses a surgeon's diploma. The title "Doctor" can be assumed only by the graduate of a University, and only by the holder of the higher degree (M.D.), and not of the lower (M.B.) The L.S.A. is entitled to call himself L.S.A. He may also call himself "general practitioner"—if he likes.

Mr. Patrick Kynoch.—1. A smaller dose has proved fatal.—2. We are unable to fix a precise limit to its use; but several papers on the subject have recently appeared in our columns.—3. It would be an unusually large dose, but might be given in the acute affection named. The preparation is often variable in strength.

Mr. D. Fairweather.—The paper has been received; but we cannot hold out any hope of publishing it at present.

MEDDLESOME MIDWIFERY.

G.—The evil justly complained of by our correspondent would not be met by Mr. Gay's suggestion being acted upon. Such conduct is proof of a want rather of conscientiousness than of skill. Any obstetrician who delivers a woman hastily or by unnatural means, unnecessarily and merely to save his own time, acts immorally.

"SERIOUS CHARGE AGAINST A MEDICAL MAN."

UNDER this heading the *Liverpool Daily Post* reports as follows:—

"Thomas Henry Wilson Crofts, a member of the Royal College of Surgeons, and in practice for twenty years at Snitzerfield, near Stratford, was yesterday committed for trial at the Warwick Assizes on two charges of giving a false certificate touching the death of Henry Need, four years of age. The case is one of absorbing interest to the medical profession. Deceased was taken ill at twenty minutes past eight o'clock, when a message was despatched for the defendant, who had attended the family for years. The child died at half-past nine, just a quarter of an hour before defendant reached the house. The mother said the child had had convulsions, and he filled up a certificate to that effect. The certificate was in the usual printed form issued by the registrar of births and deaths. Defendant did not erase the statement that he had attended the deceased, but drew his pen through the line specifying the time of the last visit. The mother was called, and said he never did attend the child. For the defence, is was stated that he had done nothing but what was common in the medical profession, especially when the family were known to be respectable, as was the case here. The bench committed him for trial at the assizes. The second prosecution was based upon a similar certificate, given to the mother to forward to the Provincial Insurance Society, the head offices of which are in Ludgate-hill, by which means she obtained a funeral payment of thirty shillings. Defendant was also committed for trial on this charge. Bail was accepted, himself in £100, and two sureties in £100 each. The case is attracting much interest in South Warwickshire."

The *Post* describes the case in rather exaggerated language as "one of absorbing interest to the medical profession." We must demur to this. The profession will not doubt that Mr. Crofts acted in simplicity and good faith on the strength of his attendance for years on the family, whom he therefore knew to be respectable; but he, nevertheless, should have declined to give a formal certificate, which is only proper to be given by a medical man who has been in attendance on the patient for the illness preceding death.

CARBOLIC ACID LOTION.

To the Editor of THE LANCET.

SIR,—Can any of your correspondents state whether and what constitutional symptoms they may have clearly observed from the long-continued application of carbolic acid lotion for the cure or mitigation, say, of chronic eczema or other skin affections? Yours, &c.,

August, 1872. TYRO.

ERRATUM.—The name of Wm. Carless, M.B., of Long Melford, whose lamented death we recorded on the 10th inst., was inadvertently misprinted "Carlos."

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. C. Allbutt, Leeds; Mr. Williams, Cardiff; Mr. Oldman; Mr. Tay; Mr. Braithwaite; Dr. Lush; Mr. Dowler; Dr. Coales; Mr. Meates; Mr. Bishop; Mr. Allen; Mr. Thomson; Mr. Teevan; Dr. Eastwood; Mr. Ellis; Mr. Broadhurst; Dr. Crowther; Mr. A. Wright; Mr. R. Smith; Mr. Glover; Mr. Bullock; Mr. Slimon; Miss Aldis; Mr. Fawcett; Mr. Cottingham; Mr. Matthews, Rhymney; Mr. Kerr; Mr. Brunton; Mr. Roberts, St. Asaph; Mr. Roche; Mr. Curwen; Mr. Newton; Mr. Ewens; Mr. Shorter; Mr. Harley, Saffron Walden; Dr. Agar; Mr. Parslee; Dr. Reed; Dr. Carless, Stroud; Dr. Smythe, Liverpool; Dr. Wilson, Glasgow; Mr. W. Acton; Mr. Kerbey, Weobley; Dr. Rawson, Thornton; Mr. J. Dunne, Dublin; Mr. H. Maund, Sandown; Mr. Hunter, Margate; Mr. Wheelhouse, Leeds; Mr. Cuffe; Mr. Hill; Dr. Foster; Mr. Conolly; Dr. Baylis; Mr. Pocock; Mr. Greer; Mr. Hall, Sheffield; Mr. Wilkinson; Dr. Arnison; Dr. Hooper; Dr. Clave; Mr. D. Paterson; Dr. Griffiths; Dr. Murphy; Mr. Fletcher; Mr. Gilruth; Dr. Fairweather; Mr. Fountain; Mr. Kynoch; Mr. Ricketts; Mr. Broom; Mr. Hopgood; Dr. Long; Dr. Thomas; Mr. Langworthy; Mr. L. H. Jones; Dr. Spencer; Mr. Lomas; Mr. Wood, Leamington; Mr. G. S. Taylor; Staff Assistant-Surgeon Ferguson; Dr. J. Jones; Mr. Cross; Mr. Tuck; Mr. Fitzgerald; Dr. Pyle; Dr. Power; Mr. Morrison; Mr. J. Williams; Dr. Finlayson; Mr. Green; Mr. Kemp; Mr. Mitchell; Mr. G. Norman; Mr. Reeve; Mr. Britton; Mr. Daunt; Mr. M'Rae; Mr. Colmer; Mr. Snow; Dr. Baines; Mr. Cresswell; Mr. Stride; Mr. Butterfield; Mr. Packard; Mr. Phillips; Mr. Hardy; Mr. Berry; Mr. Harris; Dr. Lister; Dr. Walsh, Halifax, Nova Scotia; Dr. C. Hall; Dr. Dusart; Mr. Watts; Mr. Evans; Mr. De Wilde; Mr. Pritchard; Mr. Robinson; M.B.; Justice; Veritas; F. G.; F.R.C.S.; A Lover of Pure Water; Tyro; A Medical Dispenser; Medicus; G.; Anti-Humbug; J. M.; B. G. Z.; K. G.; Quantum Valeat; J. O. B.; M.D.; &c. &c.

Penrith Observer, Educational Gazette, Irish Times, Newcastle Chronicle, Chemists and Druggists' Advocate, South-Eastern Gazette, Chemist and Druggist, and *Parochial Critic* have been received.

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